

*Official Statement***CALIFORNIA TOLL BRIDGE AUTHORITY**

*Bridges San Francisco bay
Investments Public securities*



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\$49,800,000

UNIVERSITY OF CALIFORNIA

**Antioch and Carquinez Strait Bridges
1976 Revenue Bonds**

Bids to be received by the Treasurer of the State of California at 10:00 a.m., Wednesday, June 16, 1976
at the Treasurer's office in the State Capitol, Sacramento, California



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CALIFORNIA TOLL BRIDGE AUTHORITY

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Roy E. Demmon
Vice Chairman

Robert E. Lovett
Member

Roy M. Bell
Director of Finance

Floyd Sparks
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Adriana Gianturco, *Director of Transportation*
Administrative Officer and Secretary, California Toll Bridge Authority

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Treasurer for the 1976 Revenue Bonds

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Fiscal Agents

Orrick, Herrington, Rowley & Sutcliffe, *San Francisco*
Bond Counsel

Stone & Youngberg Municipal Financing Consultants, Inc., *San Francisco*
Financing Consultant

THE DATE OF THIS OFFICIAL STATEMENT IS MAY 11, 1976

DEPARTMENT OF TRANSPORTATION

OFFICE OF DIRECTOR

1120 N STREET

SACRAMENTO, CALIFORNIA 95814



May 11, 1976

TO WHOM IT MAY CONCERN:

The purpose of this Official Statement is to supply information to prospective bidders on and buyers of \$49,800,000 Antioch and Carquinez Strait Bridges 1976 Revenue Bonds, authorized and issued for the purpose of constructing a new Antioch Bridge, approach improvements to the Benicia-Martinez Bridge, paying of expenses in connection with issuance, and providing reserve funds for the retirement, on December 1, 1979, of the then outstanding Carquinez Strait Bridges Refunding Toll Bridge Revenue Bonds, Series A, issued in October 1963.

Bidders are advised that the legislation authorizing the issuance of bonds to build the new Antioch Bridge permits the pledge of revenues from the existing Carquinez and Benicia-Martinez Bridges only from and after December 1, 1979, and that in addition, as further described hereinafter in this Official Statement, certain of the Carquinez Strait Bridges Refunding Toll Bridge Revenue Bonds, Series A, cannot be redeemed or retired until December 1, 1979. Bidders should therefore be aware that the sole security for the 1976 Revenue Bonds on or before December 1, 1979 consists of (a) the funds established out of the proceeds of the 1976 Revenue Bonds and (b) the various acts and covenants of the Authority designed to terminate the prior pledge of the Carquinez Strait Bridges Refunding Bonds by December 1, 1979. These acts and covenants include a covenant to maintain rates and charges sufficient to provide for the redemption of all of such bonds by December 1, 1979; the establishment of a trust fund designed to be a measure of additional security should for any reason the Authority fail to redeem sufficient bonds as well as provisions permitting the invasion of the Reserve Fund established for the 1976 Revenue Bonds to the extent necessary to redeem or retire any outstanding Carquinez Strait Bridges Refunding Bonds; and a covenant to issue additional bonds, if necessary, in an amount sufficient to redeem on or before December 1, 1979 any then outstanding Carquinez Strait Bridges Refunding Bonds. All references in this Official Statement to a pledge of revenues from and after December 1, 1979 are subject to the above provisions.

The material contained in this Official Statement was prepared by Stone & Youngberg Municipal Financing Consultants, Inc., in the capacity of financing consultant to the State of California Department of Transportation with regard to the Antioch and Carquinez Straits Bridges 1976 Revenue Bonds. (Such firm will receive compensation from the Authority contingent upon the sale and delivery of the Bonds.) Summaries herein presented of the Resolution of Issuance, engineering reports, financial and economic data and forecasts do not purport to be complete, and reference is made to the documents on file in the office of the Director of Transportation of the State of California for further information. Statements which involve estimates or opinions, whether or not expressly so described herein, are intended solely as such and are not to be construed as factual reports.

The Official Statement does not constitute a contract with the buyers or holders, from time to time, of the Bonds. The Resolution of Issuance, which does constitute such a contract, accompanies the Official Statement and is available to any prospective bidder on request from the Director of Transportation.

The legal opinion, approving the validity of the Bonds, will be furnished by Orrick, Herrington, Rowley & Sutcliffe, San Francisco, Bond Counsel to the Authority (Bond Counsel will receive compensation from the Authority contingent upon the sale and delivery of the Bonds).

No dealer, broker, salesman or other person has been authorized by the Authority to give any information or to make any representations other than those contained herein and, if given or made, such other information or representation must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of any offer to buy nor shall there be any sale of the Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale.

The execution and distribution of this Official Statement have been duly authorized by the California Toll Bridge Authority.

ADRIANA GIANTURCO
Director of Transportation
State of California

Administrative Officer and Secretary
California Toll Bridge Authority

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Map of north central California showing the major freeway and highway systems serving Alameda, Contra Costa, Marin, Napa, Sacramento, San Francisco, San Mateo, Santa Clara, Solano, Sonoma, and Yolo Counties. The shaded area in the center portion of the map indicates the location of the Sacramento and San Joaquin river crossings by the Carquinez Strait and Antioch Bridges. A more detailed map of this area is presented on page 16 of the Official Statement.

Base map reproduced by permission of the National Automobile Club, copyright owner.

INTRODUCTION

The California Toll Bridge Authority has owned and operated the Carquinez Strait bridge crossing since 1940. The original Carquinez Bridge was acquired by the State of California from the American Toll Bridge Company, which built and operated the bridge from 1927 until 1940.

In December 1955, the Authority issued \$46,000,000 of Series A revenue bonds to finance construction of a new larger bridge parallel to the existing structure, together with new approaches to both bridges. Series B bonds, in the amount of \$34,000,000, were issued in July 1959, to finance construction of a bridge between the cities of Benicia and Martinez, about six miles upstream from the Carquinez Bridges, replacing a state-owned toll ferry. Both series of bonds were secured by the revenues of all three bridges. The second Carquinez Bridge was opened to traffic on November 25, 1958 and the Benicia-Martinez Bridge, recently named the George Miller, Jr. Memorial Bridge, was opened on September 16, 1962.

Actual traffic and revenues of the bridges exceeded official estimates and, in October 1963, the Authority issued \$75,000,000 of Carquinez Strait Bridges Refunding Toll Bridge Revenue Bonds, Series A, to effect an interest savings over the original issue and to provide funds for the construction of an additional approach to the Benicia-Martinez Bridge. All of the then outstanding Series A and B Bonds were called and redeemed on December 1, 1963 and September 1, 1964, respectively. A total of \$10,000,000 from the proceeds of the Refunding Bonds was used to construct an additional approach to the northerly terminus of the Benicia-Martinez Bridge, in connection with the construction of a highway connection to Interstate 80 at Cordelia. The Refunding Bonds are presently secured by a pledge of the revenues of all three bridges.

In 1975, the Legislature of the State of California approved final legislation for the construction of a new Antioch Bridge to replace an existing antiquated structure built in 1925, located some 25 miles up-

stream from the Benicia-Martinez Bridge, including additional improvements to the Benicia approach of the Benicia-Martinez Bridge. The bill permitting the new project authorized the Authority to pledge the revenues of the existing Carquinez Strait Bridges, together with the revenue to be received from the new bridge, to secure the bonds to be issued by the Authority to finance the project. The effective date of the pledge is December 1, 1979, the first date on which all the outstanding Refunding Bonds can, by their terms, be fully retired.

Surplus revenues of the existing bridges have been utilized by the Authority to accelerate the redemption of the Refunding Bonds. Of the original \$75,000,000 issue of Refunding Bonds, a total of \$27,860,000 of term bonds have been purchased or redeemed prior to maturity, \$20,550,000 of serial bonds have been paid at maturity and there is presently outstanding a total of \$26,590,000. Of this amount, \$9,940,000 are non-callable serial bonds, payable annually from December 1, 1976 through December 1, 1979, and \$16,650,000 of term bonds due December 1, 1992. The term bonds are presently subject to call.

The Authority is presently offering for sale Antioch and Carquinez Strait Bridges 1976 Revenue Bonds in the amount of \$49,800,000 to finance the new project. The Resolution of Issuance for the 1976 Revenue Bonds also contains provisions to assure the retirement of the outstanding Refunding Bonds by requiring that: (1) the Authority will redeem at least \$2,350,000 of term bonds annually, starting on December 1, 1976, (2) the Authority will establish from bond proceeds a bond trust fund in the amount of \$2,350,000, (3) the Authority may utilize the Reserve Fund established for the 1976 Revenue Bonds and (4) the Authority will issue additional bonds for redemption of the outstanding bonds, if necessary.

To assure an adequate flow of net revenues to fully redeem the outstanding bonds, the Authority has adopted an order to increase the tolls on the Carquinez Strait Bridges, effective July 1, 1976, provided the 1976 Revenue Bonds are issued and delivered. Interest on the 1976 Revenue Bonds will be funded through December 1, 1979. From and after December 1, 1979, all of the revenues from the bridges are pledged to the payment of the 1976 Revenue Bonds. The Resolution for the 1976 Revenue Bonds requires the Authority to maintain tolls so as to provide a coverage ratio of net revenues equal to 1.2 times annual bond service. A bond

reserve fund in the amount of \$2,500,000 will be established from bond proceeds and will be maintained over the life of the bonds.

The Authority projects that the anticipated net revenues from the new Antioch Bridge will be nomi-

nal for some time. The revenue base for the 1976 Revenue Bonds will, therefore, be the net revenues of the existing Carquinez and Benicia-Martinez Bridges which have a lengthy and sizable revenue history.

THE CALIFORNIA TOLL BRIDGE AUTHORITY

The California Toll Bridge Authority exists pursuant to Chapter 1, Division 17, of the Streets and Highways Code of the State of California, as amended. The Authority is composed of five members: the State Secretary of Business and Transportation, the State Director of Finance and three members appointed by the Governor.

The present members of the Authority are:

Donald E. Burns, Secretary of Business and Transportation, Chairman, member since January 1975

Roy M. Bell, Director of Finance, member since January 1975

Roy E. Demmon, member, Vice Chairman
Real Estate Developer, member since December 1969

Robert E. Lovett, member
Professional Management Consultant, member since February 1974

Floyd Sparks, member
Newspaper Publisher, member since April 1968

Adriana Gianturco, Director of Transportation, is the Administrative Officer and Secretary of the Authority. Ms. Gianturco, who was appointed by the Governor on March 15, 1976, has a background in planning and economics. Richard C. East is Assistant Secretary and has served in that capacity since 1959.

The Authority has the power to authorize and direct the Department of Transportation of the State of California to build or acquire toll bridges or other toll highway crossings, including approaches, and to issue revenue bonds of the Authority for that pur-

pose. The Authority must pay the revenue bonds out of revenues received from the particular facilities for which the bonds were issued. The Authority is also empowered to fix toll rates and to change those tolls from time to time, subject to certain powers of the Metropolitan Transportation Commission, which is discussed in a later section of this Official Statement. The Department of Transportation has full charge of the acquisition, construction, operation and maintenance, and toll collections of the facilities of the Authority. The Authority has no power to levy taxes or assessments.

In addition to the new Antioch Bridge, the Authority currently owns and operates eight toll bridges throughout the State. Two bridges are located in Southern California: the Vincent Thomas Bridge in Los Angeles and the San Diego-Coronado Bay Bridge. The remaining six bridges are located in the Greater San Francisco Bay Area. The San Francisco-Oakland Bay Bridge, the San Mateo-Hayward Bridge, the Dumbarton Bridge, and the Richmond-San Rafael Bridge all provide crossings of San Francisco Bay. The parallel Carquinez Bridges, and the Benicia-Martinez Bridge, collectively called the Carquinez Strait Bridges, provide crossings of the Sacramento River as it enters San Pablo Bay.

Each bridge or group of bridges was financed by revenue bonds, secured from revenues solely derived from each bridge or group of bridges. None of the Authority's revenue bonds are secured by a general pledge of the Authority's revenues. Operating expenses of each bridge or bridge group are treated in a similar fashion. Under State law, maintenance costs of the Carquinez Strait Bridges are paid from the State Highway Fund and are not a charge against bridge revenues. Legislation enacted in 1975 will permit maintenance costs of these bridges to be paid from revenues after all bonds secured by such revenues have been redeemed.

Approximately 110 persons are involved in the direct operation of the Carquinez Strait Bridges. All such persons are State employees in the State Department of Transportation and are covered by the California Public Employees' Retirement System.

THE BONDS

Authority for Issuance

The \$49,800,000 principal amount of Antioch and Carquinez Strait Bridges 1976 Revenue Bonds (hereinafter referred to as "the Bonds" or "1976 Revenue Bonds") are to be issued pursuant to a Resolution of the California Toll Bridge Authority, adopted as to form on May 11, 1976, and referred to as "the Resolution" in this Official Statement. Under the provisions of Chapter 1, Division 17, Streets and Highways Code of the State of California, as amended, the Authority is empowered to issue revenue bonds. A copy of the Resolution which describes the 1976 Revenue Bonds and their terms and conditions accompanies this Official Statement.

Terms of Sale

Bids for the purchase of the Bonds will be received by the State Treasurer on behalf of the Authority in Sacramento, California, on June 16, 1976. Details as to the terms of sale are included in the Official Notice of Sale, adopted May 11, 1976.

Description of the Bonds

The 1976 Revenue Bonds consist of \$49,800,000 aggregate principal amount, numbered 1 to 9960, inclusive, each in the denomination of \$5,000 and all dated June 1, 1976. Bonds will mature on December 1 of the following years.

SCHEDULE OF MATURITIES

Year	Principal Amount	Year	Principal Amount
1981 ...	\$ 780,000	1987 ...	\$ 1,170,000
1982 ...	840,000	1988 ...	1,250,000
1983 ...	900,000	1989 ...	1,340,000
1984 ...	960,000	1990 ...	1,430,000
1985 ...	1,030,000	2000 ...	21,450,000
1986 ...	1,100,000	2005 ...	17,550,000

The \$21,450,000 of Bonds maturing in 2000 and \$17,550,000 of Bonds maturing in 2005 are term bonds, and minimum term bond payments are required in order to assure their payment at or before maturity. Interest is payable semiannually on June 1 and December 1 of each year. Both interest and principal are payable at the office of the Treasurer of the State of California, Treasurer of the Authority for the 1976 Revenue Bonds, or, at the option of the holder, at any fiscal agent of the Authority in Chicago, Illinois or New York, New York.

Minimum Term Bond Payments

In order to provide for the payment of the \$21,450,000 term bonds maturing December 1, 2000 and \$17,550,000 term bonds maturing December 1, 2005, the Resolution provides that beginning on December 15, 1990, revenues will be transferred to the Sinking Fund each month in amounts sufficient to call and redeem the following principal amount of term bonds on December 1 of each year at the then prevailing redemption price.

MINIMUM TERM BOND PAYMENTS

Year	Minimum Amount	Year	Minimum Amount
1991	\$1,550,000	1999	\$2,670,000
1992	1,660,000	2000	2,870,000
1993	1,770,000	2001	3,060,000
1994	1,890,000	2002	3,270,000
1995	2,030,000	2003	3,500,000
1996	2,180,000	2004	3,730,000
1997	2,330,000	2005	3,990,000
1998	2,500,000		

Redemption Provisions

The \$5,190,000 principal amount of serial bonds maturing December 1, 1987 through December 1, 1990 and the term bonds maturing December 1, 2000 and December 1, 2005, in the principal amounts of \$21,450,000 and \$17,550,000, respectively, are subject to call and redemption at the option of the Authority, as a whole or in part in inverse order of maturity and by lot within a maturity, on any interest payment date beginning December 1, 1986. The Treasurer may, however, exclude the term bonds of 2005 from such order. The redemption price for any bonds called will be an amount equal to the principal amount and accrued interest to the redemption date, plus a premium

based on the date of redemption, as set forth as follows.

The Resolution permits the Treasurer to apply moneys in the Sinking Fund Account to the purchase of the Bonds at public or private sale at prices not exceeding the current redemption price or the first scheduled redemption price if the Bonds are not then subject to redemption, except any term Bonds purchased prior to December 1, 1991 shall not exceed 102½ percent of the principal amount thereof, plus accrued interest. If on any October 15, beginning October 15, 1991, the Sinking Fund Account contains an amount sufficient to redeem \$50,000 principal amount of bonds, the Treasurer is required to call and redeem bonds (on the following December 1) in the maximum possible amount with the moneys then in the Sinking Fund Account. Call of bonds on the June 1 interest payment date is permitted but not required.

Notice of redemption is to be published in a newspaper or financial journal published in New York City and in a newspaper or financial journal published in San Francisco with first publication at least 30 and not more than 60 days prior to the redemption date. The Treasurer is required to give written notice to the owners of any registered bonds called for redemption as a whole or in part and is required to mail notice of redemption to the original purchaser of the Bonds, except that failure to mail such notice will not affect the validity of the redemption proceedings.

REDEMPTION DATES AND PREMIUMS

On or After Dec. 1	And Prior to Dec. 1	Premium
1986	1987	3 %
1987	1988	3
1988	1989	2¾
1989	1990	2¾
1990	1991	2½
1991	1992	2¼
1992	1993	2
1993	1994	1¾
1994	1995	1½
1995	1996	1¼
1996	1997	1
1997	1998	¾
1998	1999	½
1999	2000	¼
2000	Maturity	—

Registration

The Bonds will be issued as coupon bonds in \$5,000 denominations. The Resolution provides that coupon bonds may be exchanged by the holders for fully registered bonds without cost in denominations of \$5,000 or multiples of \$5,000, and any such fully registered bonds may be discharged from registration at the option of the holder. The Treasurer will maintain records of registration and payment and transfer of registered bonds.

Legal Opinion

All legal matters incident to the authorization, issuance and sale of the Bonds by the Authority are subject to the approval of The Honorable Evelle J. Younger, Attorney General of the State of California, and Messrs. Orrick, Herrington, Rowley & Sutcliffe, of San Francisco, bond counsel to the Authority. Copies of the approving opinion of the Attorney General and bond counsel to the Authority as to the due authorization and issuance and validity of the Bonds will be available at the time of delivery of the Bonds. Copies of the approving legal opinion, certified by the official in whose office the original will be filed, will be printed on each bond.

Tax Exempt Status

In the opinion of bond counsel, the interest on the Bonds is exempt from income taxes of the United States of America under present federal income tax laws and such interest is also exempt from personal income taxes of the State of California under present income tax laws.

Legality for Investment

The Authority has made application to the Superintendent of Banks of the State of California to certify the Bonds as a legal investment for commercial banks in the State. Upon such certification by the Superintendent, the Bonds will be legal investments in California for all trust funds, for the funds of all insurance companies, commercial banks and trust companies, and for the State school funds (subject to the statutory privilege of the Superintendent subsequently to revoke his certification at any time in his discretion).

Also, upon such certification, any moneys or funds which may be invested in bonds of the State may be invested in the 1976 Revenue Bonds and the 1976 Revenue Bonds may be used as security for the deposit of public moneys.

Treasurer and Fiscal Agents

The Resolution provides that the Treasurer of the State of California will serve as the Treasurer of the Authority for the 1976 Revenue Bonds.

The Treasurer will authenticate and deliver the 1976 Revenue Bonds on the order of the Authority, and commencing December 1, 1979 is responsible for the receipt and application of all revenue. The Treasurer serves also in other important capacities to protect the interests of bondholders. The Authority is required to submit an annual financial statement to the Treasurer, and schedules of tolls and annual estimates of revenues and expenses are also to be filed with the Treasurer. The Treasurer is also trustee for the bondholders in the matter of exercising and prosecuting their rights under the Resolution and under applicable law.

The Treasurer is responsible for registering, transferring and exchanging bonds. Fiscal Agents will be maintained by the Treasurer in the Cities of Chicago and New York for the purpose of paying interest and principal when due on the Bonds.

Any bank in the State of California which is authorized and qualified by law to accept deposits of State moneys may be appointed as a depository to receive revenues and other funds controlled by the Resolution and disburse them exclusively on the order of the Treasurer. Revenues are presently deposited daily with the Crocker National Bank in San Francisco, Fiscal Agent for the 1963 Refunding Bonds, and are transferred monthly by the bank for allocation to the funds controlled by the Resolution authorizing the 1963 Refunding Bonds.

Purpose of the Issue

The Bonds are to be issued to provide funds for the construction of a new Antioch Bridge and additional improvements to the northerly approaches of the Benicia-Martinez Bridge, expenses incidental to the sale of the Bonds, and all other charges properly chargeable to the project, and also for the payment of interest on the Bonds (to December 1, 1979), and for the establishment of Reserve and Trust Funds as described below.

Disposition of Proceeds

Money received from the sale of the Bonds will be deposited with the Treasurer and applied as follows:

1. *Interest Fund.* An amount, including the accrued interest paid by the purchasers of the Bonds, equal to the first three and one-half years' interest on the Bonds (to December 1, 1979) is to be deposited in the Interest Fund.

2. *Bond Reserve Fund.* The amount of \$3,500,000 is to be deposited in the Bond Reserve Fund. The sum of \$2,500,000 is to be maintained as a reserve for the Bonds and \$1,000,000 is to be retained as a reserve for deductible amounts under policies insuring the bridges against physical damage and waiting periods in use and occupancy insurance policies.

3. *Trust Fund.* The amount of \$2,350,000 is to be deposited in the Trust Fund, to supplement, if necessary, other funds now on hand or to become available to retire the outstanding Refunding Bonds on December 1, 1979. Any balance remaining in the fund after the retirement of the outstanding bonds may be transferred to the Construction Fund or the Retirement Fund.

4. *Construction Fund.* The balance of the proceeds remaining after the payments to the Interest Fund, the Reserve Fund and the Trust Fund is to be deposited in a special fund in the State Treasury designated the "New Antioch Bridge Construction Fund". Withdrawals from this fund may be made for the construction of the bridge and other improvements as provided in the Resolution. Any balance remaining in the fund after completion of construction may be retained for future improvements to the bridges, or transferred to the Trust Fund, if required, or deposited in the Revenue Fund.

Security

The 1976 Revenue Bonds will be secured on and after December 1, 1979 by a direct and exclusive charge and lien on the revenues of the bridges (as defined in the Resolution) and on certain other funds held by the Treasurer (including all income, interest or profits on such revenues and funds) subject only to the redemption on December 1, 1979 of the outstanding Carquinez Strait Bridges Refunding Toll Bridge Revenue Bonds, Series A, dated December 1, 1963.

Upon the redemption of the outstanding bonds, all such revenues and funds are exclusively and

irrevocably pledged to and constitute a trust fund in accordance with the terms of the Resolution and the provisions of the applicable statutes of the State of California, for the security and payment or redemption of, and for the security and payment of interest on, the 1976 Revenue Bonds issued under the Resolution.

No part of the income received by the Authority from existing or future toll bridges constructed or acquired by it elsewhere in California will be available for the Bonds. Neither the principal of the Bonds nor any interest thereon constitutes a debt, liability or obligation of the State of California.

The following subsections discuss the principal provisions established to secure payment of the Bonds.

Pledged Revenues

On and after December 1, 1979, revenues pledged to the Bonds are defined in the Resolution as including all tolls, rates, rents, fees, charges and other income received by or for the account of the Authority from the operation of the bridges, insurance moneys collected under use and occupancy insurance, interest allowed or received in respect of moneys and securities in any of the Funds created pursuant to the Resolution, together with any consideration received from lease of any properties included in the bridges, including fees or other charges collected for gasoline, tire changes, towing, and other similar services. All revenues are to be deposited in the Revenue Fund.

Application of Revenues

Commencing on December 1, 1979, all revenues of the bridges are to be deposited with the State Treasurer as they are received and are to be placed in the Revenue Fund and held in trust for the benefit of holders of the Bonds. Moneys in the Revenue Fund will be allocated on or before the 15th day of each month by the Treasurer to specific funds created by the Resolution and held by the Treasurer. These funds are described below and revenues are to be allocated each month in the stated amounts in the following order of priority.

Priority of Monthly Allocation of Revenues

1. *Expense Fund:* any amount required to maintain a balance of \$50,000. This is used to pay expenses of the Treasurer and Fiscal Agents.

2. *Interest Fund:* beginning December 15, 1979, an amount not less than one-sixth of the amount of interest on the Bonds due and payable within the next six months. Money in this fund must be used to pay interest on the Bonds, including Bonds paid, purchased, or called and redeemed pursuant to terms of the Resolution. No deposit need be made into the fund if its balance is sufficient to meet the interest due and payable within the next six months.

3. *Retirement Fund:* beginning December 15, 1980, one-twelfth of the principal amount of serial bonds maturing within the next twelve months (to be deposited in the Principal Payment Account in this fund) and, commencing December 15, 1990, one-tenth of the specified minimum annual sinking fund payments to be made within the next twelve months (to be deposited in the Sinking Fund Account in this fund). Money in the Principal Payment Account will be applied to payment of maturing principal, and money in the Sinking Fund Account is to be used for purchase of any outstanding bonds or call and redemption of term bonds.

4. *Operation Fund:* the amount required to pay the reasonable cost of operating the bridges, for the ensuing month. Money in this fund may be withdrawn as required by the Department of Transportation. The Department is to submit annually a statement of its monthly requirements for operating expenses, and the requested monthly amount is transferred to the Operation Fund by the Treasurer.

5. *Reserve Fund:* the amount required to bring this fund to its required balance. Reserve Fund requirements and a discussion of the purposes for which withdrawals from this fund may be made are presented under the heading, "Reserve Fund".

6. *Surplus Revenue Fund:* all money remaining in the Revenue Fund after the transfers specified above. Money in the Surplus Revenue Fund must be transferred by the Treasurer to the Reserve Fund whenever deficiencies exist in the Reserve Fund. Moneys remaining in the Surplus Revenue Fund are to be used at the direction of the Authority for: (1) capital improvements to the bridges, transfers to the New Antioch Bridge Construction or Retirement Funds; (2) to reimburse the Department of Transportation for any

costs of physical maintenance; (3) to purchase, call or retire any of the Bonds, or (4) to make up any deficiencies in the Reserve Fund. Any balance in the Surplus Fund, not expended for any of the aforesaid purposes, shall be transferred quarterly, beginning April 1, 1980, to the Toll Bridge Revenues Account in the State Transportation Fund, provided the Authority is in compliance with all the requirements of the Resolution.

Reserve Fund

As additional security for the 1976 Revenue Bonds, the sum of \$2,500,000 will be deposited into the Reserve Fund from the proceeds of the 1976 Revenue Bonds and maintained at this level for the life of the Bonds. This Fund will be available for the call of the outstanding Series A Refunding Bonds on December 1, 1979 in order to release the claim on revenues now held by the outstanding bonds. The Authority believes that the use of the Reserve Fund will not be necessary to effect the redemption of the outstanding bonds. However, should this event occur, then after the call of the outstanding bonds, the Reserve Fund must be increased from the first available revenues to its initial level. A higher level may be required in the event of the issuance of additional parity bonds. In no case will the Reserve Fund be less than 4% of the principal amount of all bonds outstanding or \$2,500,000, whichever is higher.

An additional sum of \$1,000,000 will also be deposited into the Reserve Fund as a reserve for deductible amounts contained in the insurance policies carried on all the bridges by the State of California. This reserve may not be reduced below the \$1,000,000 deposit, and may be increased from time to time. Information concerning insurance coverage is presented on page 30 of this Official Statement.

Money in the Reserve Fund may be used for payment of any of the following in the event other funds are not available in sufficient amounts: interest due, maturing bond principal, minimum sinking fund payments, and deficiencies in the Expense Fund. In addition, emergency withdrawals are permitted to pay the following: costs of operating the bridges and insuring the bridges and their use and occupancy, and costs of reconstructing the bridges to the extent not covered by insurance. Approval of the Treasurer is required for any emergency withdrawals from the Reserve Fund.

If the Reserve Fund balance is ever reduced below its required levels, it must be restored immediately from money in the Surplus Revenue Fund, to the extent necessary and available, with any remaining deficiency to be made up from revenues as described above. Beginning December 1, 1979, the Treasurer shall deposit into the Reserve Fund, after making all the required deposits and transfers to the Expense, Interest, Retirement, and Operating Funds, a sum equal to 20 percent of the annual debt service on the then outstanding bonds. Moneys in excess of the Reserve Fund requirement (\$3,500,000) may be used, at the request of the Authority, for additions or improvements to the bridges, for additional bridge construction or for the purchase or retirement of the Bonds.

Maintenance of Tolls and Charges

Section 5.01 of the Resolution requires the Authority from and after December 1, 1979 to establish and collect tolls and charges at rates which will provide annual net revenues equal to at least 1.20 times annual bond service. The Resolution provides specifically that rates will be fixed to yield revenues at least equal to the sum of the following, all for the ensuing twelve months:

1. The cost of operating the bridges, including use and occupancy insurance on revenues, and other expenses payable from revenues.
2. One and one-fifth times the sum of:
 - (a) Interest payments for such twelve months on all outstanding 1976 Revenue Bonds.
 - (b) The principal amount of serial bonds maturing during such twelve months.
 - (c) Minimum sinking fund payments to be made in such twelve months.
3. Any Reserve Fund deposits provided to be made for such twelve months.

The Department of Transportation is required at the start of each fiscal year to file with the Treasurer an estimate of revenues and expenses for that fiscal year pursuant to Section 5.04. Free use of the bridges is limited by Section 5.05. In general, free use is permitted only for employees directly connected with bridge operation and maintenance, including law enforcement, and for automotive equipment being used in maintenance or construction work on the bridges.

Metropolitan Transportation Commission

The California Legislature in 1975 enacted AB 664 (Chapter 1229, Statutes of 1975) which became effective January 1, 1976. Under the provisions of this bill the Metropolitan Transportation Commission, a public agency created in 1971 for the purpose of regional transportation planning and coordination in the nine Bay Area Counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma, is empowered to receive net toll bridge revenues to further the development of public transportation systems in the vicinity of toll bridges, to alleviate automobile related congestion and pollution and to diminish the need for state expenditures on new bridge facilities.

The Commission is empowered to adopt toll schedules in lieu of any schedules adopted by the Authority for a toll bridge within its jurisdiction and allocate the available net revenues for its authorized uses. However, the Authority is not required to effect any toll schedule for any bridge if it finds that the proposed toll schedule of the Commission will not generate sufficient revenues to (1) pay the required cost of operations, maintenance, rehabilitation and necessary safety improvements; (2) meet the obligations pursuant to any bond resolution; (3) repay any advance; or that the proposed schedule will adversely affect any state interest.

The bill also provides that the cost of maintenance of any bridge whose revenues are pledged to secure bonds issued after January 1, 1976, may be paid from the revenues of that bridge. The bill specifically provides that none of its provisions are to prohibit the construction of the new Antioch Bridge or the pledge of revenues to secure the bonds issued for its construction.

Competition

Section 7.09 provides that the Authority will not engage in or within its powers permit competitive crossings over the Sacramento or San Joaquin Rivers within ten miles of the Carquinez Bridges, the Benicia-Martinez Bridge or the Antioch Bridge. These prohibitions are the same as are contained in the 1963 bond resolution of the Authority and are in addition to similar provisions of the California Toll Bridge Authority Act. The Resolution refers specifically to the Authority's agreement not to permit within its powers "erection, construction, or maintenance of any vehicular or interurban rail-

way bridge, subway, tunnel, barrier, or other crossing" and provides further that the Authority will use its best efforts to prevent the granting of any franchise for "any vehicular or passenger ferry or other similar means of crossing" either of the rivers within ten miles from either side of any of the bridges.

Additional Bonds

Section 3.04 of the Resolution provides that additional bonds ranking on a parity with the 1976 Revenue Bonds may be issued by the Authority and authenticated and delivered by the Treasurer if certain conditions are complied with. Additional bonds may be issued to provide money for the purpose of constructing additional bridges, enlarging or extending any of the existing bridges or for changing their design, to finance additional approaches or improvements to the existing approaches, and to pay all incidental expenses associated with any such construction and with the issuance and sale of additional bonds. Bond proceeds may be used to reimburse the State for money advanced for these purposes.

In order to issue additional bonds on a parity with the 1976 Revenue Bonds, except if required to redeem the outstanding Refunding Bonds, the Authority must comply with the following requirements:

1. The Authority must have paid promptly when due all principal, interest, and sinking fund payments of previously issued bonds.
2. Additional bonds are to be equally and ratably secured with all outstanding bonds, and serial maturities and/or minimum sinking fund payments are to be established to retire all such additional bonds on or before their fixed maturity dates.
3. Net revenues of the bridges for the last completed fiscal year or twelve-month period (including any allowable estimated revenues) prior to the sale of the additional bonds must have been not less than 125 percent of the combined maximum annual debt service on the outstanding and additional bonds.
4. For the purposes of calculating gross revenues for the issuance of additional bonds, the Authority may include up to 80% of estimated additional revenues which would have been received if any increase in tolls and charges already

imposed had been in effect for the full year for which calculation is made.

5. The Reserve Fund must be increased to an amount equal to four percent of the face amount of the outstanding and additional bonds or \$2,500,000, whichever is higher.

Before additional bonds can be authenticated and delivered, the Treasurer must have received appropriate certificates from the Department of Transportation showing compliance with the requirements for issuance of additional bonds and from any governmental agency having jurisdiction granting any required authorization, consent, or approval. The Treasurer must receive a supplemental resolution of the Authority stating that the issuance of additional bonds is necessary or desirable for purposes specified in the Resolution and setting forth the terms and conditions of the additional bonds, together with an opinion of counsel that all requirements of law and of the Resolution have been complied with and that additional bonds may be properly authenticated and delivered.

No additional bonds may be issued before December 1, 1979, except if such sale is necessary to provide funds for the retirement of the outstanding Refunding Bonds as provided in Section 3.04(A) of the Resolution.

Investment of Funds

All moneys held in any of the funds controlled by the Resolution may be held in time or demand deposits, secured as required by law. The Treasurer may invest money in the Reserve Fund in Federal securities maturing not more than fifteen years from the date of such investment. All other money in any other fund may be invested in Federal securities maturing on or before the date such money may be required to be withdrawn from such fund. Any interest earned on money held in any fund is to be allocated to that fund. Federal securities are defined in the Resolution as including obligations of the United States and those obligations of the United States for which the full faith and credit of the United States is pledged directly or indirectly.

Insurance

The Authority covenants in the Resolution that so long as any of the bonds remain outstanding the bridges and approaches subject to the same hazards will, at all times, be insured, if obtainable at rea-

sonable rates and charges with responsible insurers against all risk of physical loss as provided by the Insurance Service Office bridge property damage form, which includes, but is not limited to, the risks of direct loss or damage caused by or resulting from fire, floods, collision, explosion, sabotage, earthquake and collapse, subsidence and other specified causes resulting in failure of any of the bridges, all to the greatest amount obtainable, not exceeding 80 percent of full insurance value, having due regard to the terms and conditions of the policies and the coverage of risk provided for. Such insurance as a whole may provide for deductions not exceeding one percent of the amount insured on any item with respect to any one casualty other than earthquake. With respect to earthquake, the deduction may not exceed five percent of the amount insured on any item, provided that policies with such permissible deductions are then obtainable from responsible insurers. The Authority also covenants to obtain war risk insurance under certain circumstances to the extent reasonably obtainable from the United States Government or one of its agencies.

The proceeds of such insurance are to be applied to the reconstruction and restoration of the bridges as set forth in the Resolution.

The Authority also covenants to carry, if obtainable at reasonable rates and charges, with responsible insurers, insurance against the loss of use and occupancy resulting from the risks and perils set forth above in an amount, if obtainable, which will provide an indemnity per diem in the event of total suspension of use of not less than 1/365th of the sum of one and one-fifth annual bond service requirements for the ensuing twelve months plus any amount required to be transferred from the Revenue Fund to the Reserve Fund and in the event of partial suspension of use, such proportion of such per diem indemnity that the actual income prevented bears to the income which would have been realized had there been no partial suspension of use. This insurance is to cover the loss of use for every day of total or partial suspension of use in excess of seven but not in excess of 372 until the bridges are completely restored to service.

Costs of the required use and occupancy insurance are to be paid from revenues. Costs of insuring the existing bridges against all risks are paid from the State Highway Fund. However, such insurance on the New Antioch Bridge must be paid from revenues.

Bridge Operation and Maintenance

“Cost of operation” of the bridges, to be paid out of revenues transferred to the Operation Fund, is defined in Section 1.01 of the Resolution. Included are costs involved in toll collection, accounting for revenues, emergency services rendered traffic, costs of use and occupancy insurance or other insurance on revenues, burglary insurance, employees’ bonds, workmen’s compensation insurance, light and power and other utilities, and other expenses which “under good accounting practice are properly chargeable to operation”. Costs of operation specifically do not include the cost of physical maintenance and insurance of the bridges against all risks (physical damage).

The costs of physical maintenance of the bridges, including the cost of insurance against all risks, are paid by the Department of Transportation out of funds available for construction of State highways. However, Chapter 1229, Statutes of 1975, provides that maintenance costs of the bridges may be paid out of revenues.

The Authority covenants in the Resolution to use its best efforts at all times to see to it that the bridges are maintained and operated in first class repair and condition and in such manner that their operating efficiency will be of the highest character and so that all lawful orders of Federal, State, or other governmental agencies having jurisdiction will be complied with. The bridges are operated and maintained by the Department of Transportation of the State of California. All State-owned toll bridges are under the supervision of the Director, Department of Transportation.

Amendment and Modification

After issuance of the 1976 Revenue Bonds, the Resolution can be amended only by a supplemental resolution of the Authority adopted pursuant to affirmative vote at a meeting or written consent of the holders or owners of 60 percent of the principal amount of all bonds and parity bonds outstanding. The limitations on purposes for which the Resolution may be amended and the procedures for amending or modifying the Resolution are set forth in detail in Article IX of the Resolution.

Remedies

The Treasurer is appointed as trustee to represent the bondholders in exercising their rights under

the Resolution and applicable law. In the event of any default by the Authority, the trustee may take appropriate action on behalf of the bondholders and, upon request of holders or owners of 20 percent of the principal amount of bonds outstanding, is required by the Resolution to take such action on behalf of the bondholders as may have been requested. The Treasurer is also attorney-in-fact of the bondholders with authority to represent the bondholders as provided in the Resolution.

Additional Covenants

In addition to covenants discussed in detail in the previous subsections of this Official Statement, the Authority agrees in the Resolution:

To pay or cause to be paid punctually all interest and principal and any premiums, in strict conformity with the terms of the Bonds and of the Resolution.

Within 120 days following the end of each fiscal year to render to the Treasurer a detailed statement of traffic, revenues and expenditures for that year, accompanied by a certificate of an independent certified public accountant or independent firm of public accountants selected by the Authority and satisfactory to the Treasurer, and to publish a summary of this statement within 150 days after the close of the fiscal year in New York, New York and in San Francisco, California.

To use its best efforts to maintain the powers, functions, duties and obligations now reposed in it pursuant to law and to do nothing voluntarily which would hinder, delay, or imperil payment of indebtedness or compliance with covenants in the Resolution.

If any part of the bridges is taken by condemnation, to deposit the proceeds with the Treasurer for the benefit of bondholders and to apply such proceeds to the retirement of bonds in strict accordance with provisions of Section 7.14 of the Resolution.

Not to invest the proceeds of the Bonds in such a manner which would result in the Bonds being taxable “arbitrage bonds” within the meaning of section 103(d), Internal Revenue Code of 1954, as amended.

Annual Bond Service Requirements

Table 1 presents an estimate of the annual bond service requirements for the 1976 Revenue Bonds based upon an estimated interest rate of 7 percent.

Table 1

CALIFORNIA TOLL BRIDGE AUTHORITY

\$49,800,000

Antioch and Carquinez Strait Bridges 1976 Revenue Bonds

Estimated Annual Bond Service

Year Ending December 1	Bonds Outstanding	Estimated Interest @ 7%	Principal Maturing or Minimum Term Bond Redemption	Premium for Minimum Redemption of Term Bonds	Total Bond Service
Serial Bonds:					
1976	\$49,800,000	\$ 1,743,000 ^①			\$ 1,743,000 ^②
1977	49,800,000	3,486,000			3,486,000 ^②
1978	49,800,000	3,486,000			3,486,000 ^②
1979	49,800,000	3,486,000			3,486,000 ^②
1980	49,800,000	3,486,000			3,486,000
1981	49,800,000	3,486,000	\$ 780,000		4,266,000
1982	49,020,000	3,431,400	840,000		4,271,400
1983	48,180,000	3,372,600	900,000		4,272,600
1984	47,280,000	3,309,600	960,000		4,269,600
1985	46,320,000	3,242,400	1,030,000		4,272,400
1986	45,290,000	3,170,300	1,100,000		4,270,300
1987	44,190,000	3,093,300	1,170,000 ^③		4,263,300
1988	43,020,000	3,011,400	1,250,000 ^③		4,261,400
1989	41,770,000	2,923,900	1,340,000 ^③		4,263,900
1990	40,430,000	2,830,100	1,430,000 ^③		4,260,100
Subtotal			\$10,800,000		
Term Bonds of 2000 ^③ :					
1991	39,000,000	2,730,000	1,550,000	\$ 34,875	4,314,875
1992	37,450,000	2,621,500	1,660,000	33,200	4,314,700
1993	35,790,000	2,505,300	1,770,000	30,975	4,306,275
1994	34,020,000	2,381,400	1,890,000	28,350	4,299,750
1995	32,130,000	2,249,100	2,030,000	25,375	4,304,475
1996	30,100,000	2,107,000	2,180,000	21,800	4,308,800
1997	27,920,000	1,954,400	2,330,000	17,475	4,301,875
1998	25,590,000	1,791,300	2,500,000	12,500	4,303,800
1999	23,090,000	1,616,300	2,670,000	6,675	4,292,975
2000	20,420,000	1,429,400	2,870,000		4,299,400
Subtotal			\$21,450,000		
Term Bonds of 2005 ^③ :					
2001	17,550,000	1,228,500	3,060,000		4,288,500
2002	14,490,000	1,014,300	3,270,000		4,284,300
2003	11,220,000	785,400	3,500,000		4,285,400
2004	7,720,000	540,400	3,730,000		4,270,400
2005	3,990,000	279,300	3,990,000		4,269,300
Subtotal			\$17,550,000		
TOTALS		\$72,791,600	\$49,800,000	\$211,225	\$122,802,825

① Six months' interest.

② Paid from bond proceeds.

③ Callable on and after December 1, 1986.

RETIREMENT OF OUTSTANDING BONDS

There is presently outstanding a total of \$26,590,000, out of an original issue of \$75,000,000 Carquinez Strait Bridges Refunding Toll Bridge Revenue Bonds, Series A, dated December 1, 1963. Of the amount outstanding, \$9,940,000 are non-callable serial bonds maturing annually from December 1, 1976 through December 1, 1979. The balance of the bonds, \$16,650,000 are term bonds due December 1, 1992 which are currently subject to call and redemption.

In anticipation of the construction of a new Antioch Bridge, the legislature of the State of California enacted AB 755 (Chapter 1078, Statutes of 1975) which authorized the Authority to pledge the revenues of the existing Carquinez Strait Bridges, together with any revenues of the new bridge, to secure the bonds issued to finance the project. The earliest date on which such pledge is authorized is December 1, 1979, the date on which all Carquinez Strait Bridges Refunding Bonds are expected to be retired.

The lien of the outstanding Refunding Bonds on the revenues of the bridges cannot be removed until the retirement of all of the outstanding Refunding Bonds. The earliest that this can occur is December 1, 1979.

Since 1967, the year in which the Refunding Bonds could first be called, the Authority has retired in advance of maturity, \$27,860,000 of term bonds from surplus revenues of the bridges. These retirements have been effected by the Authority's Fiscal Agent for the Refunding Bonds by calls, purchases and tenders in the open market. In the past several years, open market purchases have been accomplished at prices less than individual calls.

In order to assure retirement of the Refunding Bonds on December 1, 1979, the Authority covenants in the Resolution that it will maintain tolls at levels sufficient to purchase or redeem not less than \$2,350,000 of term bonds annually in order that, by December 1, 1979, a minimum of \$9,400,000 of term bonds will have been retired. These redemptions, together with the Refunding Bonds Reserve Fund of \$7,340,000, and other funds, will be sufficient to retire all \$16,650,000 of presently outstanding Refunding Bonds and the premiums thereon.

As additional security, the Authority will place into a Bond Trust Fund, from the proceeds of the 1976 Revenue Bonds, the amount of \$2,350,000 to be used as a reserve in the event that the revenue assumptions of the Authority fail to fully materialize.

Additionally, the Reserve Fund established for the 1976 Revenue Bonds may also be drawn upon, if necessary. In the event that all the above provisions are insufficient to call and retire all the outstanding bonds, the Authority has covenanted to sell prior to December 1, 1979, additional bonds to provide funds for this purpose.

Projections of net revenues by the Department of Transportation through November 30, 1979, including the use of the 1963 Reserve Fund for the Refunding Bonds, as presented in the following summary,

indicate that all the outstanding Series A Bonds can be redeemed on or by December 1, 1979. These projections assume that traffic on the Carquinez Strait Bridges will increase at the nominal rate of 1 per cent per year. Operating expenses are projected to increase at a rate of 8 per cent per year. Included in the revenue projections is the increase in bridge tolls (effective July 1, 1976) and \$4,182,000 for safety and operational improvements to the Carquinez Strait Bridges to be expended by December 1, 1979.

CARQUINEZ STRAIT BRIDGES

Projection of Net Revenues

Four Year Period Ending November 30, 1979

Year Ending November 30	1976	1977	1978	1979	Total
Toll Revenues	\$7,937,000	\$9,077,000	\$9,121,000	\$9,165,000	\$35,300,000
Investment Income	520,000	520,000	520,000	520,000	2,080,000
Miscellaneous Income	50,000	50,000	50,000	50,000	200,000
Subtotal	\$8,507,000	\$9,647,000	\$9,691,000	\$9,735,000	\$37,580,000
Operating Expenses	\$2,400,000	\$2,600,000	\$2,810,000	\$3,035,000	\$10,845,000
Estimated Safety and Operational Improvements	375,000	1,317,000	1,255,000	1,235,000	4,182,000
Subtotal	\$2,775,000	\$3,917,000	\$4,065,000	\$4,270,000	\$15,027,000
Revenues Available for Debt Service ..	\$5,732,000	\$5,730,000	\$5,626,000	\$5,465,000	\$22,553,000
Bond Interest	\$ 933,000	\$ 771,000	\$ 607,000	\$ 438,000	\$ 2,749,000
Serial Bond Redemptions	2,350,000	2,440,000	2,530,000	2,620,000	9,940,000
Term Bond Calls	2,350,000	2,350,000	2,350,000	2,350,000	9,400,000
Premium for Calls	33,000	29,000	24,000	12,000	98,000
Subtotal	\$5,666,000	\$5,590,000	\$5,511,000	\$5,420,000	\$22,187,000
Balance	\$ 66,000	\$ 140,000	\$ 115,000	\$ 45,000	\$ 366,000
Cumulative Balance	\$ 66,000	\$ 206,000	\$ 321,000	\$ 366,000	

REDEMPTION OF OUTSTANDING 1963 REFUNDING BONDS

Flow of Funds

Bonds Outstanding December 1, 1975		\$26,750,000 ^①
Serial Bonds to be retired through December 1, 1979	\$9,940,000	
Term Bonds to be called through December 1, 1979	9,400,000	19,340,000
Term Bonds to be called December 1, 1979		\$ 7,410,000
Premium payable		37,000
Additional Funds Required December 1, 1979		\$ 7,447,000
SOURCE OF ADDITIONAL FUNDS		
Reserve Fund (1963 Bonds)		\$ 7,340,000
Trust Fund (1976 Bonds) ^②		2,350,000
Cumulative Net Revenues ^②		366,000
Total Funds Available December 1, 1979		\$10,056,000

① A total of \$26,590,000 of bonds were outstanding on April 30, 1976 as term bonds with a face amount of \$160,000 have been purchased since December 1, 1975. The balance in the sinking fund on April 30, 1976 was \$750,000.

② Available as needed for call of term bonds from December 1, 1976 through December 1, 1979.

Source: Department of Transportation.



View of Carquinez Strait looking east with Solano County on the left and Contra Costa County on the right. The parallel Carquinez Bridges and the community of Crockett are in the foreground. The Benicia-Martinez Bridge is seen six miles upstream, together with the cities of Benicia and Martinez and adjacent industrial facilities situated along the shorelines.

Pacific Aerial Surveys Photo

THE BRIDGES

Bridge Locations

The two parallel Carquinez Bridges cross Carquinez Strait between Vallejo and Crockett. They are a key link of Interstate Highway 80, serving the most heavily traveled route between the San Francisco-Oakland Metropolitan Area and points north and east. The bridges are 28 miles north from San Francisco and 65 miles south from Sacramento.

The Benicia-Martinez Bridge is six miles east of the Carquinez Bridges. As part of Interstate Highway 680, this bridge provides a direct connection from north of Suisun Bay to the industrial and residential areas of central and eastern Contra Costa and Alameda Counties. It permits traffic to move freely between Sacramento and San Jose without having to pass through San Francisco, Oakland, or other large East Bay Area cities.

Both bridges also carry substantial amounts of local commuter traffic. Many of the employees at the Mare Island Naval Shipyard in Vallejo live south of Carquinez Strait, and workers in the many heavy industries along the Contra Costa County and Solano County shores also cross these bridges to their daily work.

The present Antioch Bridge is located 25 miles upstream from the Benicia-Martinez Bridge. The bridge crosses the San Joaquin River east of the City of Antioch and terminates on Sherman Island in Sacramento County. The bridge provides the main access, via State Highway 24, from eastern Contra Costa County to the agricultural and recreational areas of the Sacramento-San Joaquin Delta. The new Antioch Bridge will be located some 200 feet downstream from the present bridge.

Description of the Bridges

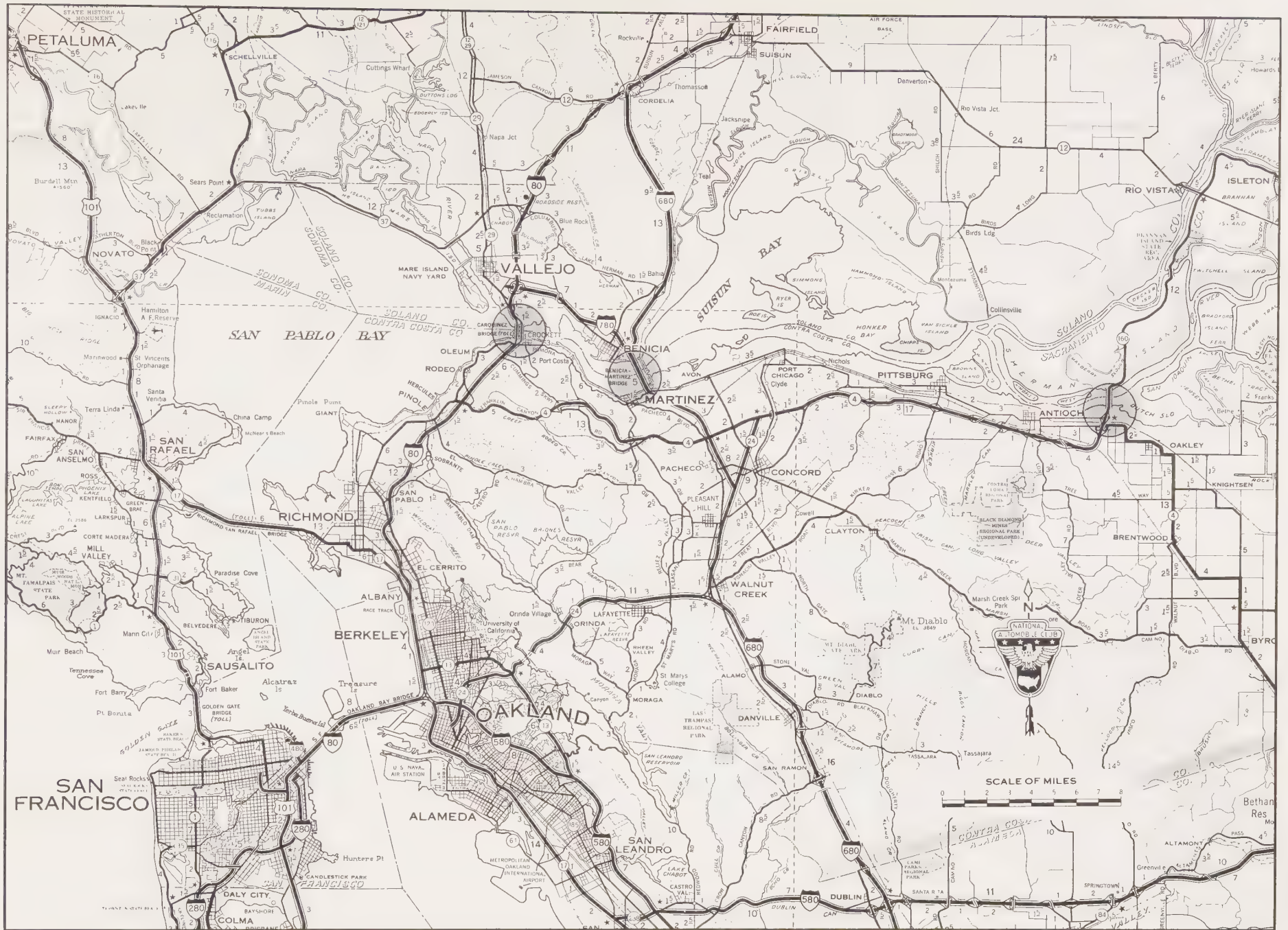
The original Carquinez Bridge was built by the American Toll Bridge Company and opened to traffic May 21, 1927. The State of California purchased the bridge in 1940 and operated it as a toll bridge until August 1, 1945, when it was made toll-free.

The parallel Carquinez Bridge, built with revenue bonds, was opened to traffic on November 25, 1958, and tolls were then instituted on both bridges. The second bridge was built to resemble the original structure in appearance but is wider and differs in structural details. The newer bridge is 200 feet upstream from the original bridge and currently carries four lanes of traffic on a 52-foot-wide roadway. The original bridge carried three lanes of southbound traffic until it was closed for major refitting and modernization in November 1974. These improvements were completed in March 1976, and the bridge has been reopened for southbound traffic. All northbound traffic uses the newer bridge.

The bridges are both double cantilever structures 3,350 feet long. Each has two main spans 1,100 feet long. Two openings for navigation are provided, 998 and 1,000 feet wide and with 146.5 feet vertical clearance for ships passing through Carquinez Strait to reach the Ports of Sacramento and Stockton and deepwater berths along the Contra Costa shore. A toll plaza with eight collection booths and an administration building is situated at the north end of the bridges.

The Benicia-Martinez Bridge was opened on September 15, 1962 and replaced a State-owned toll ferry which was discontinued. The Benicia-Martinez Bridge is a deck truss cantilever structure 6,215 feet long and 62 feet wide between curbs. Span lengths range from 330 to 528 feet, and vertical clearance of 135 feet is provided. The bridge is 200 feet downstream from the Southern Pacific railroad bridge, built in 1927, which carries the Southern Pacific main line tracks from San Francisco and Oakland to the north and east. The bridge provides four lanes of traffic, two in each direction. A toll plaza with five collection booths and an administration building is situated at the north end of the bridge.

The existing Antioch Bridge was also built in 1925 by the American Toll Bridge Company. The State of California acquired the bridge as part of the purchase of the Carquinez Bridge in 1940. The bridge has been toll free since August 1945. The existing bridge is a 21-foot wide, cantilever single-span of two lanes, approximately one mile in length. A center lift section provides a vertical clearance of 136 feet and there are two 265 foot clear channel widths for passing ships and other marine traffic. Over the years, the bridge has been subject to closure due to failure of the lift mechanism and ship collisions. The bridge is considered to be a hazard



Map of the central San Francisco Bay Area showing the primary bridges and highway systems. The locations of the Carquinez Bridge, the Benicia-Martinez Bridge, and the Antioch Bridge are indicated by the circled shaded areas.

Base map reproduced by permission of the National Automobile Club, copyright owner.

to navigation, having been hit 14 times at its fenders, and three major collisions in 1958, 1963 and 1970 resulted in structural damage and subsequent closure. The 1970 collision resulted in the bridge being closed to traffic for 4½ months. This bridge will be removed upon completion of the new Antioch Bridge, which is described in "The Project" section of this Official Statement.

Interstate Highways

The Carquinez Bridges are a part of and connected at each end to Interstate Highway 80, a full six-lane freeway. This highway is the major trans-continental route connecting the San Francisco-Oakland Metropolitan Area with Sacramento and points to the east.

The Benicia-Martinez Bridge is a key link to Interstate Highway 680. This highway runs from San Jose, in Santa Clara County, at the junction of Interstate 280 and U. S. Highway 101, north through central Alameda and Contra Costa Counties, to Cordelia in Solano County, where it connects with Interstate 80, some 12 miles north of Benicia. The City of Vallejo is connected with the City of Benicia,

via the Benicia-Vallejo Freeway (Interstate 780), which was constructed as a part of Interstate 680.

Interstate Highway 5, the principal north-south intrastate route in California, connects with Interstate 80, at Sacramento, some 50 miles north-east of the three Carquinez Bridges.

The new Antioch Bridge is served by State Highway 4, which runs from Hercules, where it joins Interstate 80, to Stockton some 57 miles to the east. Sections of this highway are currently being constructed to full freeway standards from Martinez to Antioch, a distance of about 25 miles. Completion of existing construction is scheduled for 1978. The northern terminus of the Antioch Bridge connects to State Highway 160 in Sacramento County which links to Interstate 5 near Sacramento, about 40 miles to the north.

A map showing the bridge locations and highway connections is presented on the opposite page.

Competitive Crossings

Upon completion of construction of the new Antioch Bridge (and the closing of the existing bridge) and its inclusion with the Carquinez Strait

The Benicia-Martinez Bridge looking south toward Contra Costa County and the City of Martinez. This bridge is a part of Interstate 680 which connects the areas of northern Santa Clara and central Contra Costa and Alameda Counties to Interstate 80 in Solano County. The railroad bridge of the Southern Pacific Company is to the left. A portion of the facilities of the Shell Oil Company and the Lion Oil Company appears in the background.



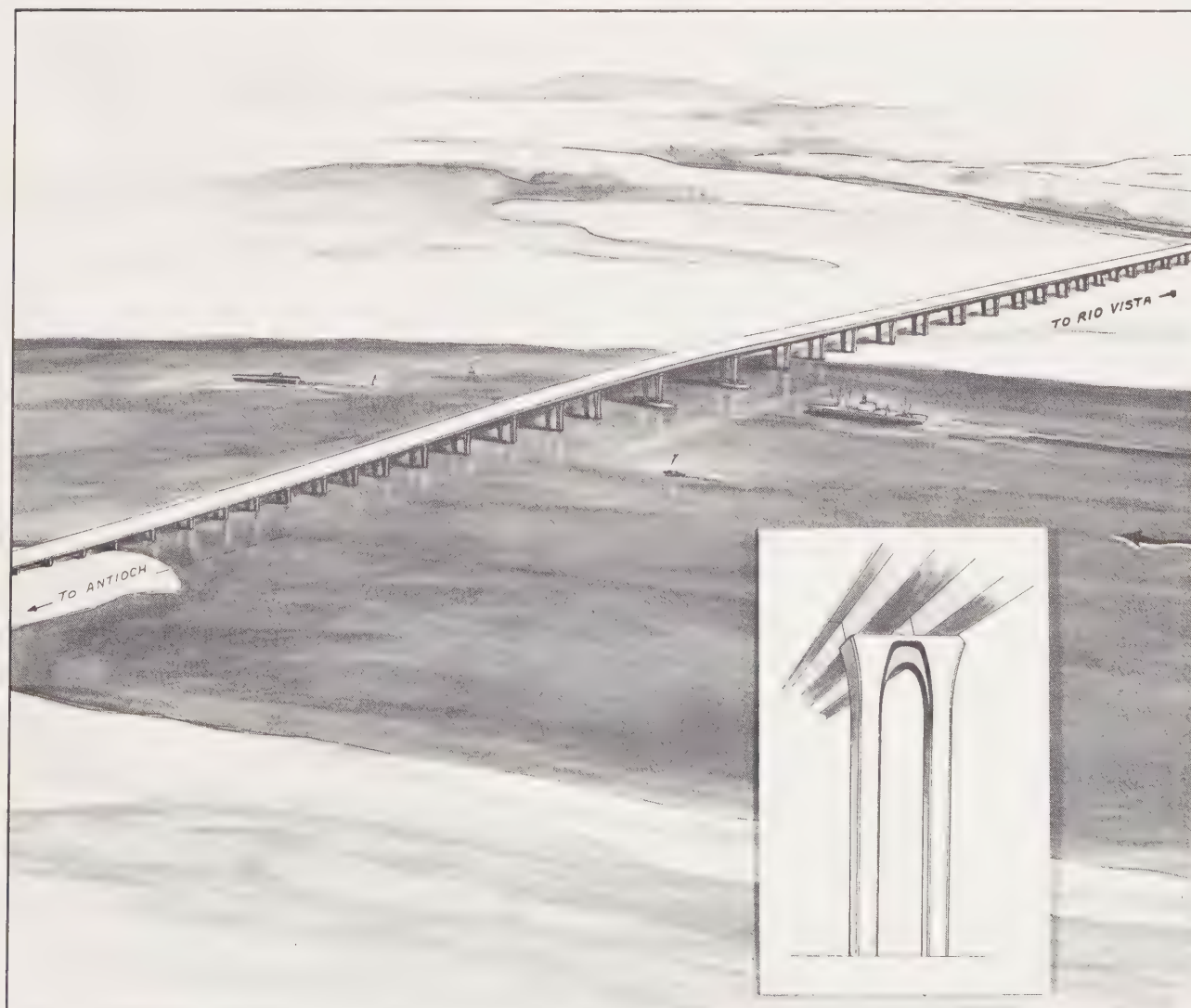
Bridges, there will be no vehicular crossing of Carquinez Strait, Suisun Bay, or the San Joaquin River (at Antioch) which will not be subject to a toll charge by the Authority.

The Carquinez (Interstate 80) or the Benicia-Martinez (Interstate 680) routes are the shortest and fastest routes from almost all points north of Carquinez Strait and Suisun Bay to western and central Alameda and Contra Costa Counties, to San Francisco, and San Mateo and Santa Clara Counties. The only other access from eastern Solano County to Contra Costa County is via the Antioch Bridge.

San Francisco-San Mateo County traffic to Sacra-

mento, which represents a large proportion of total use on the Carquinez Bridges, could use State Route 37 along the north end of San Pablo Bay, by taking U.S. Highway 101, crossing the Golden Gate Bridge, passing through San Rafael and connecting to State Route 37 at Ignacio. Traffic from southern Marin County to Sacramento could also avail itself of State Route 37. However, this route is 47 miles from Vallejo to San Francisco while the Carquinez Bridge-San Francisco-Oakland Bay Bridge route is 33 miles. From southern Marin County the quickest and shortest route to Sacramento and points north is Interstate 80 via the Richmond-San Rafael Bridge which is toll free in the easterly direction.

Artist's rendition of the new Antioch Bridge looking to the north.



THE PROJECT

The New Bridge

The new Antioch Bridge will be constructed as a two-lane, 40-foot wide, high-level fixed span bridge. The bridge will be approximately 8,600 feet in length and will have a vertical clearance of 135 feet at mid-span. The bridge's horizontal clearance of 400 feet at mid-span will span the deepwater shipping channel. The existing bridge's constructed width of 265 feet restricts the channel.

The new bridge will be situated about 200 feet downstream from the existing bridge. Traffic lanes will consist of two 12-foot wide lanes for motor vehicles and two 8-foot lanes for pedestrians and bicyclists with appropriate safety barriers. Bridge approaches will require a realignment of State Route 160 (two-lanes) on Sherman Island at the north terminus of the bridge and a slight change to State Route 4 (four-lanes) on the Antioch side of the bridge. A toll plaza, administration building and

three collection booths will be located at the south end of the bridge.

The bridge was designed by the Office of Structures, California State Department of Transportation, the agency having responsibility for the design of all State highway bridges and structures.

The bridge project has been approved by the U. S. Coast Guard, U. S. Army Corps of Engineers and the Federal Highway Administration. All State, regional and local permits have been obtained. The Authority expects to receive \$10,000,000 from the Federal Special Bridge Replacement Fund towards the financing of the new bridge. A condition of the Federal funds is that the bridge will be toll free after all of the bonds have been retired.

Estimated Project Costs

Table 2 presents a summary of the estimated total project costs and sources of funds. Of the total indicated cost for the new bridge and approaches, exclusive of contingencies and the Benicia approach improvements, of \$42,300,000, a total of \$33,375,501, or 79% is represented by a firm construction bid. Bids were received on May 5, 1976 and the construction contract will be awarded after the sale of the Bonds.

The low bidder for the bridge and approaches was Peter Kiewit Sons Company, Concord, California, a construction firm with considerable experience in bridge construction.

Table 2
NEW ANTIOCH BRIDGE
Estimated Project Costs

New Bridge and Approaches	\$39,800,000 ^①	
Toll Collection Facilities	1,200,000	
Removal of Existing Bridge	1,300,000	
Benicia Approach Improvements	2,800,000	
Contingencies	3,300,000 ^②	
Subtotal		\$48,400,000
Funded Interest (3½ years @ 7%)	\$12,201,000	
Reserve Fund	3,500,000	
Bond Trust Fund	2,350,000	
		18,051,000
Total		\$66,451,000
Less: Estimated Interest Earnings @ 5½%	\$ 6,651,000	
Federal Funds	10,000,000	
		16,651,000
Bond Funds Required		\$49,800,000

① Includes allowances for rights of way, engineering, insurance, and bond issuance costs.

② Includes allowance for bond discount.



Aerial view of the existing Antioch Bridge looking north toward Sacramento County across the San Joaquin River. The new Antioch Bridge will be constructed approximately 200 feet downstream (to the left) from the existing bridge seen in the upper right. The Antioch approach (State Highway 4) of the new bridge appears at the bottom of the photograph. Industrial facilities seen along the shore include the Contra Costa generating plant of Pacific Gas & Electric Company, Fibreboard Corporation and Crown Zellerbach Corporation. The inset on the left is a closeup of the existing Antioch Bridge looking south.

Pacific Aerial Surveys Photo

Construction Schedule

The dates of completion of various stages of construction as estimated by the Department of Transportation for the new Antioch Bridge are presented in the following summary. The contract for the construction of the bridge is scheduled to be awarded in June, 1976, on the basis of bids received on May 5, 1976. The contract provides that the contractor pay \$2,100 per day for each day that work is delayed beyond the time for completion specified in the contract, provided that for specified causes (including acts of God, strikes, etc.) the time for completion may be extended by the Department of Transportation. Each contractor will be required to furnish a performance bond in the amount of 50%

of the contract amount, executed by a surety company or companies. Each contractor is also required to furnish a labor and materials bond in an amount not less than 50% of the contract amount to insure the payment of labor and materials furnished by the contractor.

The bridge contract calls for completion of all work within 1,000 working days of the award of the contract. All major work on the bridge is scheduled to be finished by November 22, 1980, with the bridge to be open for traffic on November 22, 1980. The improvements to the Benicia approach are scheduled for completion on January 1, 1978.

CONSTRUCTION SCHEDULE

New Antioch Bridge

	Initiation of Contract Work	Estimated Contract Completion
Bridge and Approaches	August 25, 1976	November 22, 1980
Toll Plaza & Administration Building	October 20, 1979	October 22, 1980
Removal of Existing Bridge	January 20, 1981	August 28, 1981

Traffic Estimates

As stated earlier, the only northerly highway connection over the San Joaquin River, connecting east Contra Costa County with the Delta communities of Rio Vista, Isleton, Walnut Grove, and Lodi, is the Antioch Bridge. The bridge serves as the major transportation artery for the commercial, agricultural and recreational interests within the San Joaquin-Sacramento River Delta.

Traffic on the existing bridge is somewhat seasonal, with the heaviest traffic occurring in the summer months, principally attributed to recreational activities (boating, fishing and camping). Construction of the new bridge is not expected to greatly increase traffic. A traffic census, taken in 1974 by the Department of Transportation, indicated an annual average daily traffic on the bridge of 4,500 vehicles (1,642,500 annually) in both directions. The peak month, August, indicated an average daily count of 6,000 vehicles. Traffic projections by the Department for the new Antioch bridge are as follows:

Year	Average Daily Traffic (2-Way)	Annually
1980	6,000	2,190,000
1998	14,000	5,110,000

Based upon these estimates, gross revenues from the bridge will probably be adequate to meet estimated operating costs, with some funds available to partially meet maintenance and physical damage insurance costs. It was contemplated by the Authority and the State Legislature that the Antioch Bridge would never be fully self-supporting and that the benefits of the new bridge will be the elimination of the navigational hazard in the deepwater channel to Stockton and the removal of the existing antiquated and unsafe bridge. Without the bridge, traffic originating in the Antioch area desiring to reach the delta communities, or the reverse, would be required to travel an additional 50 miles, either by going west via Martinez or east via Stockton.



Aerial view of the parallel Carquinez Strait Bridges looking north. The original bridge is on the left and parallel bridge completed in 1958 is to the right. These bridges are a part of Interstate 80, one of the most heavily travelled highways in Northern California. The City of Vallejo and the U.S. Naval Shipyard at Mare Island appear at the top of the photograph to the right and left, respectively. A portion of the community of Crockett and the refinery of the California & Hawaiian Sugar Company are seen at the bottom of the photo.

FINANCIAL AND OPERATING DATA

Table 3 presents a combined financial summary of operating revenues and charges against revenues for the bridges for the past ten fiscal years. The figures presented have been taken from the audited annual reports of the independent certified public accountants retained by the Authority (Fiscal Years 1965/66 to 1971/72—Arthur Young & Company; Fiscal Years 1972/73 to 1974/75—Price Waterhouse & Company). A summary of annual coverage of existing bond service is also indicated.

As noted in Table 3, revenues of the bridges are stable and show modest annual increases, except for declines in the fiscal year ending 1970 and 1971 as a result of a toll reduction in February 1970. Revenues also declined in 1974 as result of the energy crisis.

Table 4 presents individual financial summaries of the Carquinez Bridges and the Benicia-Martinez Bridge, which are combined in Table 3. Also indicated in the tables are the maintenance expenses of

the bridges, which are paid from the State Transportation Fund-Highway Account.

Table 5 presents summaries of traffic and toll revenues for the past ten fiscal years for each individual bridge group. For the year ending June 30, 1975, Class I vehicles (principally passenger automobiles) accounted for nearly 93% of the total volume and 68% of the total revenues of the bridges. Buses represented less than 1% of the volume and about 2% of the total revenue. Trucks represented about 6% of the volume and 30% of the revenues. The apparent decline in truck traffic, beginning in 1973/74, is primarily attributed to a change in classification wherein tolls for 2-axle, 4-wheel trucks (pick-ups, campers, recreational vehicles) were changed to a Class I vehicle toll (auto). During 1974/75, users of trip commute books accounted for 17.3% of all toll vehicles on the Carquinez Bridges and 15.6% of the Benicia-Martinez Bridge.

Table 6 presents the most recent published operating statement (unaudited) of the bridges for the month of December 1975 and twelve months ended December 31, 1975. A consolidated balance sheet (unaudited), as of June 30, 1975, prepared by the Department of Transportation and included in the Department's annual report, and interim figures as of December 31, 1975 is presented in Table 7.

A history of the vehicular traffic for the Carquinez and Benicia-Martinez crossings for selected years from 1935 to June 30, 1975 is presented below.

HISTORY OF VEHICULAR TRAFFIC—Carquinez and Benicia-Martinez Crossings

Year	Carquinez Bridge(s)	Benicia-Martinez
1935	1,159,340	126,715
1939	2,036,996	141,703
1941 First full year State ownership of Carquinez Bridge	4,603,690	224,704
1946 Carquinez Bridge toll free; all-time high on ferry	6,550,000	288,424
1951	10,041,000	255,697
1954 Ferry under State ownership with lower weight limit	9,879,000	207,572
1957 Last full year of toll-free bridge operation; ferry restored after 20-month suspension of service	10,467,000	139,148
1959 New Carquinez Bridge open	11,963,442	227,404
1963 Estimated first full year of Benicia-Martinez Bridge	13,243,385	2,107,800
1966①	15,188,288	4,029,969
1970①	16,494,494②	9,175,216②
1975①	18,704,260②	12,751,152②

① Fiscal year ending June 30.

② 2-way equivalents (double one-way trips).

Table 3

CARQUINEZ STRAIT BRIDGES

Summary of Revenues, Charges Against Revenues and Fund Balances

Year Ending June 30	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Operating Revenues:										
Tolls	\$ 6,347,197	\$ 6,772,711	\$ 7,417,558	\$ 7,855,973	\$ 7,436,212	\$ 6,587,542	\$ 7,001,305	\$ 7,326,186	\$ 7,011,921	\$ 7,068,951
Rents	3,662	5,084	2,240	3,705	3,664	3,660	3,679	3,696	3,691	3,717
Roadway Services ..	3,883	3,843	3,489	3,702	8,036	8,050	8,006	8,424	3,355	1,799
Credit Fees and Miscellaneous	12,355	12,434	15,021	10,130	13,728	24,741	35,907	38,564	45,646	50,414
Subtotal	\$ 6,367,097	\$ 6,794,072	\$ 7,438,308	\$ 7,873,510	\$ 7,461,640	\$ 6,623,993	\$ 7,048,897	\$ 7,376,870	\$ 7,064,613	\$ 7,124,881
Charges Against Operating Revenues:										
Administration (Salaries and Wages) ..	\$ 146,843	\$ 157,532	\$ 184,500	\$ 204,190	\$ 205,270	\$ 218,368	\$ 278,877	\$ 305,919	\$ 325,780	\$ 394,716
Operations (Salaries and Wages)	755,492	809,920	967,776	1,024,648	892,028 ^①	911,866	987,732	1,022,223	1,133,732	1,409,458
Other	106,199	113,806	111,916	268,994	154,258	318,088	217,874	200,277	321,099	369,460
	\$ 1,008,534	\$ 1,081,258	\$ 1,264,192	\$ 1,497,832	\$ 1,251,556	\$ 1,448,322	\$ 1,484,483	\$ 1,528,419	\$ 1,780,611	\$ 2,173,634
Use and Occupancy Insurance	16,402	16,509	16,228	19,367	20,059	22,527	21,518	21,861	21,660	21,900
Income Before Interest Income ..	\$ 5,342,161	\$ 5,696,305	\$ 6,157,888	\$ 6,356,311	\$ 6,190,025	\$ 5,153,144	\$ 5,542,896	\$ 5,826,590	\$ 5,262,342	\$ 4,929,347
Interest Income	299,821	282,417	291,949	379,316	469,987 ^②	434,906	360,476	394,228	621,689	633,045
Income Before Debt Service ...	\$ 5,641,982	\$ 5,978,722	\$ 6,449,837	\$ 6,735,627	\$ 6,660,012	\$ 5,588,050	\$ 5,903,372	\$ 6,220,818	\$ 5,884,031	\$ 5,562,392
Other Charges Against Revenues:										
Interest on Bonds ..	\$ 2,647,783	\$ 2,472,802	\$ 2,288,682	\$ 2,102,578	\$ 1,888,838	\$ 1,735,483	\$ 1,565,998	\$ 1,384,909	\$ 1,237,631	\$ 1,095,012
Fiscal Agent Expenses	13,743	15,256	15,639	14,678	14,014	13,830	12,967	15,393	12,557	17,650
Amortization of Refunding Expenses, etc.	68,408 ^③	11,276	11,316	11,115	65,682	—	—	—	—	—
Subtotal	\$ 2,729,994	\$ 2,499,334	\$ 2,315,637	\$ 2,128,371	\$ 1,968,534	\$ 1,749,313	\$ 1,578,965	\$ 1,400,302	\$ 1,250,188	\$ 1,112,662

Excess of Revenues Over Charges	\$ 2,911,988	\$ 3,479,388	\$ 4,134,200	\$ 4,607,256	\$ 4,691,478	\$ 3,838,737	\$ 4,324,407	\$ 4,820,516	\$ 4,633,843	\$ 4,449,730
Fund Balance, Begin- ning of Year	7,815,310	7,996,549	8,261,433	7,847,905	7,405,542	8,019,961	7,544,393	8,275,025	7,855,997	9,241,003
Construction Fund Transfers	889,251	900,000	84,830	—	—	—	—	—	—	—
	<u>\$11,616,549</u>	<u>\$12,375,937</u>	<u>\$12,480,463</u>	<u>\$12,455,161</u>	<u>\$12,097,020</u>	<u>\$11,858,698</u>	<u>\$11,868,800</u>	<u>\$13,095,541</u>	<u>\$12,489,840</u>	<u>\$13,690,733</u>
Bonds Retired④	<u>3,620,000</u>	<u>4,114,504</u>	<u>4,632,558</u>	<u>5,049,619</u>	<u>4,077,059</u>	<u>4,314,305</u>	<u>3,593,775</u>	<u>5,239,544</u>	<u>3,248,837</u>	<u>3,869,112</u>
Fund Balance End of Year	\$ 7,996,549	\$ 8,261,433	\$ 7,847,905	\$ 7,405,542	\$ 8,019,961	\$ 7,544,393	\$ 8,275,025	\$ 7,855,997	\$ 9,241,003	\$ 9,821,621

Source: Audited Annual Reports, Department of Transportation.

① Reflects savings due to one-way toll collection.

② Includes \$35,055 from sale of property.

③ Includes bond redemption premium, discount on bonds retired, and refunding expenses.

④ Represents cost of bonds retired and not face amount of bonds.

Bonds Retired:										
Serial	\$ 1,070,000	\$ 1,260,000	\$ 1,470,000	\$ 1,680,000	\$ 1,820,000	\$ 1,880,000	\$ 1,950,000	\$ 2,030,000	\$ 2,100,000	\$ 2,180,000
Term	<u>2,550,000</u>	<u>2,900,000</u>	<u>3,325,000</u>	<u>3,650,000</u>	<u>2,470,000</u>	<u>2,545,000</u>	<u>1,695,000</u>	<u>3,250,000</u>	<u>1,175,000</u>	<u>1,760,000</u>
Total	\$ 3,620,000	\$ 4,160,000	\$ 4,795,000	\$ 5,330,000	\$ 4,290,000	\$ 4,425,000	\$ 3,645,000	\$ 5,280,000	\$ 3,275,000	\$ 3,940,000

Summary of Bond Coverage

Year Ending June 30	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Net Operating Revenues	\$ 5,559,831	\$ 5,952,190	\$ 6,422,882	\$ 6,709,834	\$ 6,580,316	\$ 5,574,220	\$ 5,890,405	\$ 6,205,425	\$ 5,871,474	\$ 5,544,742
Required Bond Service:										
Interest Expense . . .	\$ 2,647,783	\$ 2,472,802	\$ 2,288,682	\$ 2,102,578	\$ 1,888,838	\$ 1,735,483	\$ 1,565,998	\$ 1,384,909	\$ 1,237,631	\$ 1,095,012
Serial Maturities . . .	<u>1,070,000</u>	<u>1,260,000</u>	<u>1,470,000</u>	<u>1,680,000</u>	<u>1,820,000</u>	<u>1,880,000</u>	<u>1,950,000</u>	<u>2,030,000</u>	<u>2,100,000</u>	<u>2,180,000</u>
Total	\$ 3,717,783	\$ 3,732,802	\$ 3,758,682	\$ 3,782,578	\$ 3,708,838	\$ 3,615,483	\$ 3,515,998	\$ 3,414,909	\$ 3,337,631	\$ 3,275,012
Indicated Coverage . .	1.50	1.59	1.71	1.77	1.77	1.54	1.68	1.82	1.76	1.69

Table 4—Summary of Operating Revenues and Charges

Year Ending June 30	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
CARQUINEZ STRAIT BRIDGES										
Operating Revenues:										
Tolls	\$5,133,319	\$5,284,873	\$5,365,312	\$5,206,443	\$4,783,584	\$4,180,830	\$4,320,830	\$4,455,876	\$4,287,553	\$4,241,425
Rents	3,641	5,019	2,172	3,625	3,596	3,590	3,611	3,600	3,594	3,612
Roadway Services	2,754	2,432	2,130	2,400	4,666	4,633	4,825	5,204	2,320	1,054
Credit Fees and Miscellaneous	10,509	10,209	12,268	7,528	9,498	16,477	25,677	27,021	32,962	35,013
	<u>\$5,150,223</u>	<u>\$5,302,533</u>	<u>\$5,381,882</u>	<u>\$5,219,996</u>	<u>\$4,801,344</u>	<u>\$4,205,530</u>	<u>\$4,354,943</u>	<u>\$4,491,701</u>	<u>\$4,326,429</u>	<u>\$4,281,104</u>
Charges Against Operating Revenues:										
Administration (Salaries and Wages)	\$ 97,023	\$ 105,951	\$ 119,261	\$ 129,110	\$ 119,454	\$ 129,733	\$ 159,828	\$ 174,309	\$ 188,075	\$ 241,610
Operations (Salaries and Wages)	499,179	541,062	617,143	636,238	522,497	535,384	574,170	591,933	653,564	835,101
Other	70,169	72,973	68,899	210,429	89,691	219,344	146,832	111,162	150,451	183,459
Use and Occupancy Insurance	15,069	15,166	14,885	14,744	14,744	14,335	14,131	14,131	13,930	13,830
	<u>\$ 681,440</u>	<u>\$ 735,152</u>	<u>\$ 820,188</u>	<u>\$ 990,521</u>	<u>\$ 746,386</u>	<u>\$ 898,796</u>	<u>\$ 894,961</u>	<u>\$ 891,535</u>	<u>\$1,006,020</u>	<u>\$1,274,000</u>
Gross Operating Income	<u>\$4,468,783</u>	<u>\$4,567,381</u>	<u>\$4,561,694</u>	<u>\$4,229,475</u>	<u>\$4,054,958</u>	<u>\$3,306,734</u>	<u>\$3,459,982</u>	<u>\$3,600,166</u>	<u>\$3,320,409</u>	<u>\$3,007,104</u>
Maintenance-Highway Account ^①	\$ 296,139	\$ 404,229	\$ 454,869	\$ 515,332	\$ 576,574	\$ 770,468	\$ 713,712	\$ 793,409	\$ 899,968	\$1,115,933
BENICIA-MARTINEZ BRIDGE										
Operating Revenues:										
Tolls	\$1,213,878	\$1,487,838	\$2,052,246	\$2,649,530	\$2,652,628	\$2,406,712	\$2,680,475	\$2,870,310	\$2,724,368	\$2,827,526
Rents	20	65	68	80	68	70	68	96	97	105
Roadway Services	1,130	1,411	1,359	1,302	3,370	3,417	3,181	3,220	1,035	745
Credit Fees and Miscellaneous	1,846	2,225	2,753	2,602	4,230	8,264	10,230	11,543	12,684	15,401
	<u>\$1,216,874</u>	<u>\$1,491,539</u>	<u>\$2,056,426</u>	<u>\$2,653,514</u>	<u>\$2,660,296</u>	<u>\$2,418,463</u>	<u>\$2,693,954</u>	<u>\$2,885,169</u>	<u>\$2,738,184</u>	<u>\$2,843,777</u>
Charges Against Operating Revenues:										
Administration (Salaries and Wages)	\$ 49,819	\$ 51,581	\$ 65,239	\$ 75,080	\$ 85,816	\$ 88,635	\$ 119,049	\$ 131,610	\$ 137,705	\$ 153,106
Operations (Salaries and Wages)	256,314	268,858	350,633	388,410	369,531	376,482	413,562	430,290	480,168	574,357
Other	36,030	40,833	43,017	58,565	64,567	98,744	71,042	89,115	170,648	186,001
Use and Occupancy Insurance	1,333	1,343	1,343	4,623	5,315	8,192	7,387	7,730	7,730	8,070
	<u>\$ 343,496</u>	<u>\$ 362,615</u>	<u>\$ 460,232</u>	<u>\$ 526,678</u>	<u>\$ 525,229</u>	<u>\$ 572,053</u>	<u>\$ 611,040</u>	<u>\$ 658,745</u>	<u>\$ 796,251</u>	<u>\$ 921,534</u>
Gross Operating Income	<u>\$ 873,378</u>	<u>\$1,128,924</u>	<u>\$1,596,194</u>	<u>\$2,126,836</u>	<u>\$2,135,067</u>	<u>\$1,846,410</u>	<u>\$2,082,914</u>	<u>\$2,226,424</u>	<u>\$1,941,933</u>	<u>\$1,922,243</u>
Maintenance-Highway Account ^①	\$ 36,729	\$ 110,239	\$ 134,935	\$ 175,265	\$ 577,968	\$ 124,787	\$ 159,395	\$ 129,271	\$ 155,603	\$ 687,954

① In accordance with Section 188.3 of the California Streets and Highways Code, toll bridge maintenance expenses are paid from the State Transportation Fund—Highway Account.

Table 5
CARQUINEZ STRAIT BRIDGES
Summary of Traffic and Toll Revenues

Fiscal Year		Toll Vehicles			Free Vehicles	Total Vehicles	Toll Revenues				Average Toll Per Revenue Vehicle
		Class I	Trucks	Buses			Class I	Trucks	Buses	Total	
1965/66	2-Way	13,073,533	1,925,905	149,186	39,664	15,188,288	N.A.	N.A.	N.A.	\$5,133,319	\$0.339
1966/67	2-Way	13,547,426	1,985,332	173,051	39,056	15,744,865	\$3,077,784	\$2,026,724	\$180,365	5,284,873	0.336
1967/68	2-Way	13,757,361	2,066,665	169,168	41,749	16,034,943	3,108,560	2,078,862	177,890	5,365,312	0.335
1968/69 ^①	2-Way	8,052,361	1,233,917	100,505	25,048	9,411,831					
	1-Way	2,737,210	401,294	34,171	12,417	3,185,092	3,019,249	2,007,259	179,935	5,206,443	0.660 ^③
1969/70	1-Way	7,060,233	1,070,204	83,484	33,326	8,247,247	2,783,435	1,840,719	159,430	4,783,584 ^②	0.582
1970/71	1-Way	7,348,714	1,140,136	78,026	30,947	8,597,823	2,403,119	1,646,261	131,450	4,180,830	0.488
1971/72	1-Way	7,628,431	1,158,866	73,488	29,624	8,890,409	2,514,170	1,682,119	124,541	4,320,830	0.488
1972/73	1-Way	7,850,321	1,210,420	69,023	31,397	9,161,161	2,569,712	1,771,311	114,853	4,455,876	0.488
1973/74	1-Way	7,900,474	937,926	66,857	33,609	8,938,866	2,577,202	1,600,185	110,166	4,287,553	0.481
1974/75	1-Way	8,680,497	578,134	63,125	30,374	9,352,130	2,840,679	1,298,496	102,250	4,241,425	0.455

BENICIA-MARTINEZ BRIDGE
Summary of Traffic and Toll Revenues

Fiscal Year		Toll Vehicles			Free Vehicles	Total Vehicles	Toll Revenues				Average Toll Per Revenue Vehicle
		Class I	Trucks	Buses			Class I	Trucks	Buses	Total	
1965/66	2-Way	3,473,550	532,070	2,647	21,702	4,029,969	N.A.	N.A.	N.A.	\$1,213,878	\$0.303
1966/67	2-Way	4,195,241	650,251	4,181	24,116	4,873,789	\$ 924,483	\$ 559,160	\$ 4,195	1,487,838	0.307
1967/68	2-Way	5,631,498	921,152	7,687	25,264	6,585,601	1,248,361	796,166	7,719	2,052,246	0.313
1968/69 ^①	2-Way	4,043,152	682,780	5,313	14,619	4,745,864					
	1-Way	1,534,236	250,973	2,499	8,463	1,796,171	1,601,295	1,037,797	10,438	2,649,530	0.636 ^③
1969/70	1-Way	3,908,718	658,999	4,889	15,002	4,587,608	1,599,482	1,044,177	8,969	2,652,628 ^②	0.580
1970/71	1-Way	4,307,311	755,265	5,987	13,341	5,081,904	1,412,754	984,718	9,240	2,406,712	0.475
1971/72	1-Way	4,710,699	823,073	6,250	11,966	5,551,988	1,572,380	1,098,187	9,908	2,680,475	0.484
1972/73	1-Way	4,996,814	890,168	6,809	10,620	5,904,411	1,663,836	1,195,617	10,857	2,870,310	0.487
1973/74	1-Way	5,091,074	650,203	7,461	11,014	5,759,752	1,694,756	1,017,648	11,964	2,724,368	0.474
1974/75	1-Way	5,996,584	356,215	8,467	14,260	6,375,526	2,005,358	808,498	13,670	2,827,526	0.444

① Effective February 1, 1969, tolls are collected from vehicles travelling in a northbound direction only.

② Tolls reduced 30% for Class I vehicles, effective February 1, 1970; truck and bus tolls reduced approximately 25%.

③ Estimated.

Source: Annual Reports, Department of Transportation.

Table 6

CARQUINEZ STRAIT BRIDGES

Statement of Operations (Special Deposit Fund, Unaudited)

	December 1975	December 1974	12 Months Ended December 31, 1975	12 Months Ended December 31, 1974
TRAFFIC ^①				
Passenger Vehicles	1,261,152	1,189,164	15,100,996	13,865,018
Trucks	72,660	67,540	939,476	960,130
Buses	5,309	5,436	70,230	73,487
TOTAL TOLL TRAFFIC	1,339,121	1,262,140	16,110,702	14,898,635
REVENUES				
Toll Revenue	\$578,393	\$546,235	\$7,207,697	\$6,855,887
Net Earnings on Investments	45,500	44,370	626,900	644,680
Miscellaneous Income	3,740	3,719	51,924	54,498
TOTAL GROSS REVENUE	\$627,633	\$594,324	\$7,886,521	\$7,555,065
CHARGES AGAINST REVENUES	\$169,785	\$187,815	\$2,321,069	\$2,040,583
NET OPERATING REVENUE	\$457,848	\$406,509	\$5,565,452	\$5,514,482
INTEREST ON BONDED DEBT	\$ 77,370	\$ 88,680	\$ 981,690	\$1,138,980
INTEREST COVERAGE	5.9	4.5	5.7	4.8
INTEREST AND SINKING FUND COVERAGE	1.7	1.5	1.7	1.6
BONDS REDEEMED	\$ 35,000	\$305,000	\$3,645,000	\$4,660,000

SUMMARY FOR DECEMBER 1975

	Carquinez Bridge	Benicia Bridge	TOTAL
Gross Revenue	\$386,278	\$ 241,355	\$ 627,633
Net Revenue	\$283,429	\$ 174,419	\$ 457,848
Average Daily Gross	\$ 12,460	\$ 7,786	\$ 20,246
Total Toll Vehicles	765,088	574,033	1,339,121
Average Toll Vehicles Per Day	24,680	18,517	43,197
BONDED INDEBTEDNESS AS OF DECEMBER 31, 1975		\$26,715,000	

	Cash	Investments	TOTAL
FUNDS HELD BY FISCAL AGENTS:			
Expense Fund	\$ 2,733.60	\$ 48,508.50	\$ 51,242.10
Operation Fund	963.56	209,036.44	210,000.00
Bond Interest Fund	5,037.77	177,516.54	182,554.31
Bond Sinking Fund	1,325.50	212,936.91	214,262.41
Bond Reserve Fund	15,739.79	7,352,201.15	7,367,940.94
Principal Payment Account	3,529.28	409,263.87	412,793.15
TOTAL FUNDS	\$ 29,329.50	\$ 8,409,463.41	\$8,438,792.91

① One-Way Toll Traffic.

Source: Department of Transportation.

Table 7

CARQUINEZ STRAIT BRIDGES

Consolidated Balance Sheet (Unaudited) as of June 30, 1975 and December 31, 1975

	June 30, 1975	December 31, 1975
ASSETS		
Cash:		
On deposit with fiscal agent	\$ 15,651	\$ 90,236
Undeposited collections	120,006	108,017
Change funds	21,600	21,600
On deposit with State Treasurer	236,669	1,413
Accounts Receivable:		
Toll charges, rents, etc.	218,749	191,842
Investments:		
Securities at cost	9,444,473	8,409,463
Accrued interest receivable	165,351	—
Deferred Charges:		
Prepaid insurance	22,520	11,525
Prepayments—Highway Account		2,740
Fixed Assets (at cost less retirements):		
Carquinez Bridges	49,603,284	49,604,505
Benicia-Martinez Bridge	39,253,320	39,253,320
TOTAL ASSETS	\$99,101,623	\$97,694,661
LIABILITIES AND FUND BALANCE		
Current Liabilities:		
Accounts payable	\$ 354,784	\$ 2,119
Accrued interest payable	87,059	—
Deferred Income:		
Scrip outstanding	(8,645)	(269)
Long-Term Liabilities:		
Bonds payable	30,125,000	26,715,000
Fund Balance	68,543,425	70,977,811
TOTAL LIABILITIES AND FUND BALANCE	\$99,101,623	\$97,694,661

Source: Department of Transportation.

Tolls and Charges

The basic toll covenant of the Resolution for the outstanding bonds and the Resolution for the 1976 Revenue Bonds provides that charges shall, at all times, be in effect sufficient to provide net revenues at least 1.20 times debt service. In computing net revenues, operating costs of the bridges are deductible from gross revenues.

Tolls and charges on the new Antioch Bridge will not be established until the bridge is ready for use, which is expected to be in late-1980. These tolls may or may not be the same tolls as charged on the Carquinez Strait Bridges. The Authority has the power to separately alter the toll rates on the three bridges as long as the net revenues are in com-

pliance with the Resolution. In fixing tolls and charges, the Authority is not subject to the jurisdiction of any other agency or department except for the provisions relating to the Metropolitan Transportation Commission which is more fully discussed in an earlier section of this Official Statement.

No free traffic is permitted except for Federal government vehicles specified in permits and agreements between the United States and the State of California, State law enforcement and bridge maintenance vehicles on official business, and contractors' vehicles and equipment engaged in construction or rehabilitation work on the bridges and approaches.

A summary of the current toll schedule for the Carquinez Strait Bridges is presented below. This schedule has been in effect since February 1, 1970 and represents, for Class I vehicles and trucks and buses, a reduction of 30% and approximately 25%, respectively, over the schedule in effect since 1963. The basic Class I vehicle toll prior to February 1, 1970 was \$.50 and the toll for a two-axle truck was \$1.00. The Authority adopted an order on May

11, 1976 increasing certain tolls to become effective July 1, 1976, provided the 1976 Revenue Bonds are issued and delivered. The revised toll classifications are also presented.

Insurance

The Authority presently carries use and occupancy insurance on the bridges in the following amounts: Carquinez Bridges—\$3,595,000, the Benicia-Martinez Bridge—\$2,540,000. The annual premium for the use and occupancy insurance presently is \$22,682. This insurance is designed to cover revenues for the estimated period required for reconstruction of the bridges in the event of total loss.

Physical damage insurance on the bridges is presently carried at 50% of replacement cost which is \$29,276,000 for the Benicia-Martinez Bridge and \$77,840,000 for the Carquinez Bridges and approaches, subject to deductibles aggregating approximately \$3,100,000 in the event of earthquake damage to various segments of the structures and deductibles aggregating approximately \$1,000,000 for physical damage exclusive of earthquakes. Although the total coverage is below the presently estimated replacement costs of \$36,595,000 for the Benicia-Martinez Bridge and \$97,300,000 for the Carquinez Strait Bridges, it is considered to be adequate for any foreseeable physical damage, as the foundation piers and main tower structures are considered by the Department of Transportation to be virtually indestructible. The current annual premium for the physical damage insurance is presently \$443,400 and is presently paid from the State Transportation Fund.

Due to the proximity of the Carquinez Bridges and the Benicia-Martinez Bridge to each other, in the event of a closure of one of the bridges, traffic is capable of being diverted to one of the other bridges without a significant impact upon total revenues. Deductibles and details of the all-risk insurance policies may be obtained from the Department of Transportation on request.

In the event of physical damage not covered by insurance, or in excess of insurance coverage, or damage covered by insurance but replaced or reconstructed prior to actual collection of insurance claims, surplus moneys in the Bond Reserve Fund may be applied to repair and reconstruction, but only if the Treasurer is satisfied that such use of the moneys is to the interest of bondholders.

Current Toll Schedule—Carquinez Strait Bridges

Vehicle Classification	One-Way Toll
Class I Vehicle:	
Automobile, motorcycle, tricar, ambulance, hearse, housecar, Class I bus, station wagon, taxi, or 2-axle, 4-wheel truck	\$0.35
Class I Vehicle drawing a 1-axle trailer	0.75
Class I Vehicle drawing a 2-axle trailer	1.00
Class I Vehicle drawing a 3-axle trailer	1.50
Truck, 2-axle, 6-wheel	0.75
Truck, 3-axle	1.50
Truck, 4-axle	2.50
Truck, 5-axle	3.00
Truck, 6-axle	4.00
Truck, 7-axle	5.00
Bus, 2-axle	1.50
Bus, 3-axle	2.00
Bus, 4-axle	2.50
Commuter bus	0.10
Commutation book (for Class I Vehicles only) (20 trips to be used within 60 days)	4.00

Revised Toll Schedule^①—Carquinez Strait Bridges

Vehicle Classification	One-Way Toll
Class I Vehicle:	
Automobile, motorcycle, tricar, ambulance, hearse, housecar, Class I bus, station wagon, taxi, or 2-axle, 4-wheel truck	\$0.40
Truck, 2-axle, 6-wheel	1.00
Truck, 3-axle	2.00
Truck, 4-axle	3.50
Truck, 5-axle	4.75
Truck, 6-axle	5.50
Truck, 7-axle	6.00
Commutation book (for Class I Vehicles only) (20 trips to be used within 60 days)	5.00

^① Classifications increased effective July 1, 1976.

THE GENERAL AREA SERVED BY THE CARQUINEZ AND ANTIOCH BRIDGES

The nine counties bordering on San Francisco Bay, plus Sacramento and Yolo Counties, comprise an area of 9,465 square miles, including 8,969 square miles of land. The present total population of more than 5.6 million people is expected to grow to an estimated 6.1 million by 1980. This area represents the immediate service area for the Carquinez Strait and Antioch Bridges.

These eleven counties encompass four contiguous metropolitan statistical areas (San Francisco-Oakland, San Jose, Vallejo-Fairfield-Napa and Santa Rosa), and the major part of the Sacramento Metropolitan Area. This urban complex constitutes the area of greatest traffic flow for vehicles transiting the bridges across the Carquinez Strait and, to a lesser extent, the Antioch Bridge.

In the aggregate, the eleven counties discussed in this section of the Official Statement provide employment for over 2.2 million persons and account for taxable sales exceeding \$18 billion annually. San Francisco County has the most jobs, while Santa Clara County realizes the greatest volume of taxable sales transactions. Santa Clara County is also the most populous of the eleven counties, and has the greatest number of motor vehicle registrations. The highest percentage rate of population increase between 1970 and 1975 was registered by Sonoma County, with 18.5 percent. Other counties with rates of population growth exceeding that of the areas as a whole were Napa, Santa Clara, Yolo, Sacramento, Solano and Contra Costa Counties.

Characteristics of the Tributary Counties

Although the bridges crossing the Carquinez Strait and adjacent waterways serve traffic generated in a much larger area, the tributary counties have an important effect on the bridges and are described briefly in the following paragraphs.

Contra Costa and Solano Counties, which are connected by the two Carquinez Bridges and the

Benicia-Martinez Bridge, are part of the nine-county San Francisco Bay Area. Sacramento County, which is joined to Contra Costa County by the Antioch Bridge, forms the core of the three-county Sacramento Metropolitan Area (Sacramento, Yolo and Placer Counties).

Contra Costa County is the home of heavy industry in Northern California and is a major distribution center. Manufacturing plants of the nation's leading corporations are concentrated along the northern shore of the county, which has excellent deepwater, rail, and highway facilities for transportation of industrial and consumer goods. Petroleum companies represent the largest industrial group, with Standard, Union, Shell, and Lion Oil Company (a subsidiary of The Oil Shale Corporation) operating major refineries in the county. A refinery at Hercules, formerly operated by Gulf Oil Company was recently acquired by the Coastal States Oil Company.

Industrial employers of more than 1,000 persons each, in addition to the petroleum companies, are the Pittsburg Works of the U. S. Steel Corporation and the refinery of California and Hawaiian Sugar Company at Crockett. Other large industrial employers in the county include Crown Zellerbach Corp., Dow Chemical Co., Fibreboard Corp., E. I. du Pont de Nemours and Co., Glass Containers Corp., Stauffer Chemical Co., Rheem Manufacturing Co., and Continental Can Company.

Richmond (population 73,600) is the largest city in Contra Costa County. Other cities include Antioch, Brentwood, Clayton, Concord, El Cerrito, Hercules, Lafayette, Martinez (the county seat), Mortaga, Pinole, Pittsburg, Pleasant Hill, San Pablo, and Walnut Creek. Total county population is estimated at 587,200.

Solano County lies north of Contra Costa County and the southwestern part of Sacramento County, across the deepwater channel leading to San Francisco Bay. The largest employers in the county are Mare Island Naval Shipyard at Vallejo and Travis Air Force Base at Fairfield. Mare Island is the Navy's major shipbuilding and repair facility on the West Coast. The station complement includes approximately 5,200 military personnel and 10,800 civilian employees. Travis AFB is the principal Pacific Area facility of the Military Air Transport Service and has a payroll of 9,000 military and 3,000 civilian personnel. Supporting the industrial base of the county is Exxon Corporation's huge petroleum refining complex at Benicia.

Vallejo, largest city in Solano County (population 71,000), is located at the north end of the Carquinez Bridges. Other cities in the county are Fairfield, the county seat, Benicia, Dixon, Rio Vista, Suisun City, and Vacaville.

Sacramento County lies north and east of the Sacramento-San Joaquin Delta its southwestern extremity lying between Contra Costa County to the south, and Solano County, to the north. The county covers 975 square miles, and contains 78 percent of the population of the Sacramento Metropolitan Area (Sacramento, Yolo, and Placer Counties). Estimated population of the county at July 1975 was 687,400, with approximately 262,000 people residing in the City of Sacramento.

As the location of the state capital, Sacramento County has many government offices. In March 1974, federal, state and local government employees accounted for over 43 percent of all workers covered

by payroll insurance programs, and nearly 53 percent of total salaries and wages paid by covered employers. A substantial share of federal employment is represented by three major military installations located in the county: Mather Air Force Base, McClellan Air Force Base and the Sacramento Army Depot.

Sacramento County is an important hub of transportation and distribution because of its central location in north central California. Agricultural production exceeding \$158 million annually supports a strong food processing industry, the county's leading industrial activity. Other major industries in the county are transportation equipment production, printing and publishing, and wood products manufacturing.

The following tabulations present economic data for the overall area and for each of the component counties.

POPULATION GROWTH OF THE AREA SERVED

County	Census 1950	Census 1960	Census 1970	Percent Increase 1960-70	Estimate 1975	Percent Increase 1970-75	Estimate 1980
Alameda	740,315	908,209	1,073,184	18.2%	1,086,600	1.3%	1,143,800
Contra Costa	298,984	409,030	558,389	36.5	584,900	4.7	652,800
Marin	85,619	146,820	206,038	40.3	213,800	3.8	233,200
Napa	46,603	65,890	79,140	20.1	88,600	12.0	101,600
San Francisco	775,357	740,316	715,674	(3.3)	667,700	(6.7)	661,100
San Mateo	235,659	444,387	556,234	25.2	571,100	2.7	593,100
Santa Clara	290,547	642,315	1,064,714	65.8	1,190,000	11.8	1,342,800
Solano	104,833	134,597	169,941	26.3	184,000	8.3	198,400
Sonoma	103,405	147,375	204,885	39.0	242,800	18.5	300,500
San Francisco Bay Area	2,681,322	3,638,939	4,628,199	27.2	4,829,500	4.3	5,227,300
Sacramento	277,140	502,778	634,190	26.1	687,400	8.4	753,600
Yolo	40,640	65,727	91,788	39.7	101,700	10.8	118,800
Total Area	2,999,102	4,207,444	5,354,177	27.3	5,618,600	4.9	6,099,700
State of California	10,586,223	15,717,204	19,972,135	27.1	21,113,000	5.7	22,659,000

Sources: 1950-70, U.S. Bureau of the Census.

1975 and 1980, July 1 estimates by State Department of Finance.

MOTOR VEHICLE REGISTRATIONS

Total Vehicles

County	1950	1960	1970	Percent Increase 1960-70	1975	Percent Increase 1970-75
Alameda	308,560	455,231	687,101	50.9%	954,142	38.9%
Contra Costa	117,842	209,776	375,226	78.9	562,069	49.8
Marin	35,850	74,316	134,215	80.6	203,201	51.4
Napa	21,037	34,139	59,064	73.0	98,991	67.6
San Francisco	279,706	330,416	368,959	11.7	461,393	25.1
San Mateo	103,943	231,848	390,860	68.6	573,174	46.6
Santa Clara	142,422	343,656	707,522	105.9	1,123,036	58.7
Solano	44,072	66,341	111,767	68.5	172,260	54.1
Sonoma	56,494	90,617	159,383	75.9	268,647	68.6
San Francisco Bay Area ..	1,109,926	1,836,340	2,994,097	63.0	4,416,913	47.5
Sacramento	128,259	268,760	434,822	61.8	701,695	61.4
Yolo	22,920	40,774	66,582	63.3	105,781	58.9
Total Area	1,261,105	2,145,874	3,495,501	62.9	5,224,389	49.5
State of California	4,976,296	8,569,295	13,624,177	59.0	20,031,324	47.0

Source: State Motor Vehicle Department.

GENERAL CHARACTERISTICS OF THE AREA SERVED

County	Total Area Sq. Mi.	Land Area Sq. Mi.	Total Employment 1974 ^①	Manufacturing Employment 1974 ^①	Taxable Sales 1974 (000's)
Alameda	825.4	733.0	439,606	84,886	\$ 3,544,533
Contra Costa	797.9	734.0	147,618	25,637	1,644,650
Marin	588.0	520.0	51,890	3,766	563,970
Napa	796.9	758.0	25,747	3,693	223,354
San Francisco	91.1	45.0	489,864	50,027	2,894,433
San Mateo	530.8	454.0	204,371	31,755	2,111,325
Santa Clara	1,315.9	1,302.0	471,782	154,752	3,781,550
Solano	872.2	827.0	50,314	3,800	425,670
Sonoma	1,597.6	1,579.0	65,914	9,011	710,932
San Francisco Bay Area	7,415.8	6,952.0	1,947,106	367,327	\$15,900,417
Sacramento	1,015.3	983.0	248,397	15,669	\$ 2,148,631
Yolo	1,034.0	1,034.0	32,710	3,515	315,676
Total Area	9,465.1	8,969.0	2,228,213	386,511	\$18,364,724

① As of March.

Sources: Area—California Statistical Abstract.

Employment—State Department of Employment Development.

Taxable Sales—State Board of Equalization.

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EMPLOYMENT BY INDUSTRY**Nonagricultural Wage and Salary Workers****Selected Metropolitan Areas as of February 1976 (Preliminary)**

Industry	San Francisco- Oakland	Vallejo- Fairfield- Napa	Sacramento
Total Number of Workers	1,312,500	80,800	313,200
Mineral Extraction	1,500	100	400
Construction	55,900	3,100	11,800
Manufacturing	184,600	8,000	21,400
Durable Goods	93,100	3,900	9,600
Nondurable Goods	91,500	4,100	11,800
Food Products	56,300	2,100	6,800
Other	35,200	2,000	5,000
Transportation and Utilities	120,800	3,600	16,700
Wholesale Trade	85,300	1,100	13,700
Retail Trade	199,000	13,200	55,500
Finance, Insurance, Real Estate	113,100	2,200	13,400
Services	266,100	14,500	50,200
Government	286,200	35,000	130,100

Metropolitan Areas:

San Francisco-Oakland (Alameda, Contra Costa, Marin, San Francisco and San Mateo Counties)

Vallejo-Fairfield-Napa (Solano and Napa Counties)

Sacramento (Sacramento, Yolo and Placer Counties)

Source: State Employment Development Department.

EMPLOYMENT AND UNEMPLOYMENT**Selected Metropolitan Areas as of February 1976**

	San Francisco- Oakland	Vallejo- Fairfield- Napa	Sacramento
Civilian Labor Force ^①	1,465,100	99,500	368,600
Employment ^②	1,294,500	91,800	331,200
Unemployment	170,600	7,700	37,400
Seasonally Adjusted Rate	10.7%	7.0%	8.5%
Unadjusted Rate	11.6%	7.7%	10.1%

^① By place of residence. Note that "Employment by Industry" above is based on place of work.^② Includes agricultural workers and self-employed persons.**Metropolitan Areas:**

San Francisco-Oakland (Alameda, Contra Costa, Marin, San Francisco and San Mateo Counties)

Vallejo-Fairfield-Napa (Solano and Napa Counties)

Sacramento (Sacramento, Yolo and Placer Counties)

Source: State Employment Development Department.

